

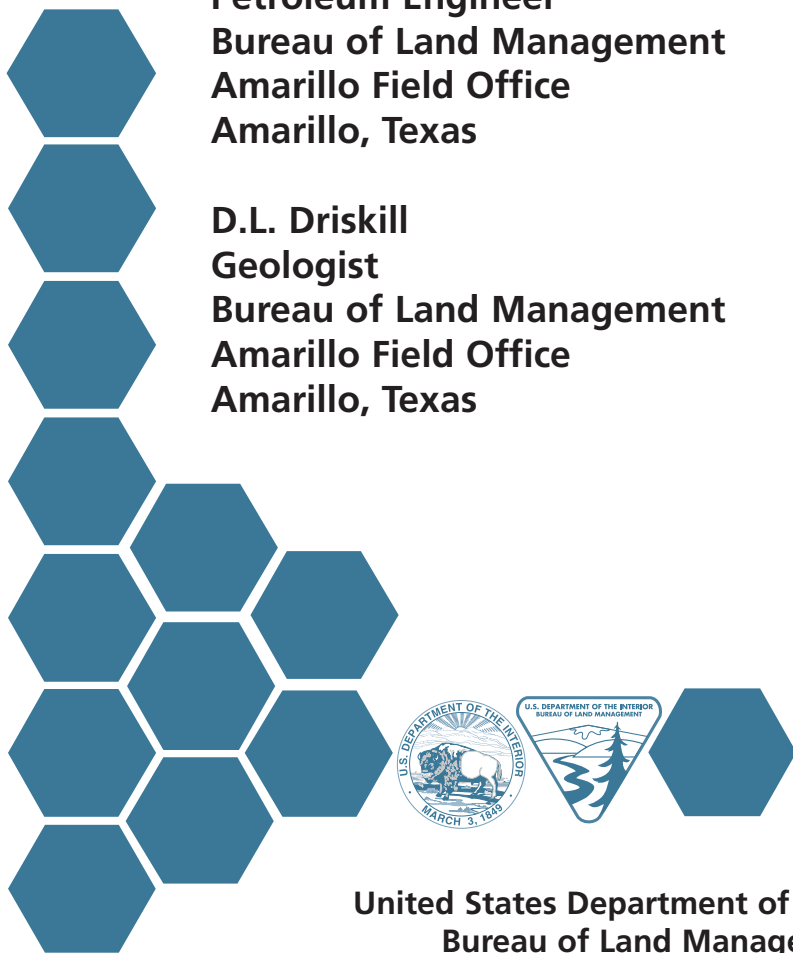
Analyses of Natural Gases, 1998–2001

Technical Note 412

May 2003

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BLM/NM/ST-03/001+3700

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http://www.nm.blm.gov/amfo/amfo_home.html

Suggested citation:

Gage, B.D. and D.L. Driskill. 2003. *Analyses of Natural Gases, 1998–2001*, Technical Note 412
Bureau of Land Management. Denver, Colorado. BLM/NM/ST-03/001+3700. 173 pp.

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A b s t r a c t

Technical Note 412 contains analyses and related source data for 311 natural gas samples from 13 States. Of the total samples, 309 were collected during calendar years 1998 through 2001. The analyses were made using mass spectroscopy and gas chromatography. None of the analyses have been published previously in other analyses reports. All samples were obtained and analyzed as

part of the United States Department of the Interior's Bureau of Land Management investigations of the occurrences of helium in natural gases of countries with free-market economies. The results of these investigations are published periodically to make the information available to members of the helium and petroleum industries and to the general public.

Introduction

Bureau of Land Management Technical Note 412, *Analyses of Natural Gases, 1998–2001*, contains analyses and related source data for 311 natural gas samples from 13 States. Of the total samples, 309 were collected during calendar years 1998 through 2001. The remaining two were collected earlier, but releases granting permission to publish them were received at a later date. None of these analyses have been published previously in other analyses reports.

The analyses were made using mass spectroscopy and gas chromatography. All samples were obtained and analyzed as part of the Bureau of Land Management investigations of the occurrences of helium in natural gases of countries with free-market economies. This helium survey program has been conducted since 1917. The results are published periodically to make the information available to members of the helium and petroleum industries and to the general public.

Forty-two publications have presented the results of 16,058 gas analyses performed through 1997. These publications are referenced at the end of this report in the section “Previous Publications in the Helium Survey Series.”

The first three bulletins (1–3)¹ contain analyses and related source data on 5,218 gas samples collected from 1917 through

1960. These bulletins have been supplemented periodically by information circulars and technical notes (4–17, 19–24, 26–30, 32–36, 38–42) containing 10,840 analyses of samples collected since 1960.

In 1976, a compilation of the analyses made prior to 1975 was prepared by the United States Bureau of Mines (USBM) and published by the National Technical Information Service of the United States Department of Commerce (18). The 1976 compilation contains 10,562 analyses of gas samples from gas and oil wells and natural gas pipelines in 37 States and 23 foreign countries.

Three other compilations of analyses have been published (25, 31, 37) by the USBM. The first of these was published in 1982 and contained analyses performed prior to 1981. The 1982 publication contains 12,554 analyses of gas samples from gas and oil wells and natural gas pipelines in 39 States and 24 foreign countries and includes the analyses from the 1976 publication (25). The second of these compilations was published in 1987 and contains 14,242 analyses performed prior to 1986. The samples were taken from gas and oil wells and natural gas pipelines in 40 States and 24 foreign countries (31). In 1991, a compilation of analyses was completed as a supplement to the 1987 publication and contains all analyses published from 1986

¹The numbers in parentheses refer to items in the list of previous publications at the end of this report.

through 1990. The 1991 publication contains 920 samples from gas and oil wells and natural gas pipelines in 26 States and 2 foreign countries (37).

In addition to appearing in the publications, all analyses and related information published through 1997 are available on CD-ROM from the National Technical Information Service (NTIS) in Springfield, Virginia (1-800-553-NTIS). Orders should refer to Bureau of Land Management CD-ROM PB98-502206. The update to the 1997 CD-ROM, which will include

the 1998–2001 analyses, should be available for purchase around the time this report is published.

The helium survey program is conducted by soliciting natural gas samples from throughout the United States and other countries with free-market economies. The helium survey, in its present scope, would not be possible without the assistance of the helium and petroleum industries, State and Federal agencies, and the many individuals engaged in oil and gas exploration and production.

Tables

Tables 1 and 2—the main focus of this technical note—include the results of analyses and related source data from the gas samples. This information is divided into two groups. Table 1 contains information on samples from gas and oil wells in the United States. Table 2 contains information on samples from natural gas pipelines in the United States. The following

chart indicates the sources of the samples listed in these tables. All components of the analyses in the tables are reported to the nearest 0.1 percent, except helium, which is reported to the nearest 0.01 percent. The word “trace” is used to denote quantities of helium of less than 0.005 percent and quantities of other components of less than 0.05 percent.

Source	Number of Samples	Table(s)	Source	Number of Samples	Table(s)
Arizona	1	1	Oregon	1	1
Arkansas	2	1	Pennsylvania	2	1
Colorado	35	1,2	Tennessee	1	1
Kansas	77	1	Texas	20	1
New Mexico	126	1	Utah	2	1
Ohio	2	1	Wyoming	3	1
Oklahoma	39	1			

Geologic Provinces of the United States

Tables 1 and 2 also include geologic province codes so each sample source can be located within a specific geologic province as defined by the Committee on Statistics of Drilling of the American Association of Petroleum Geologists. The provinces and their associated codes are provided in the list that follows and are also illustrated in Figure 1². They are

delineated by political boundaries for convenience and for accommodation of the data processing equipment. Because not all of the provinces shown are gas-producing areas, many of the codes are not used in this publication. In addition, since State or Federal ownership is not always known in offshore areas, only one code is used for each State. Due to the lack of information on the location of wells in Alaska, only one code (972) is used for all wells.

²The list and Figure 1 are taken from the article cited as: Meyer, R.F. 1970. Geologic provinces code map for computer use: American Association of Petroleum Geologists Bulletin, v. 54, n. 7, p.1301-1305.

Code	Province
100	New England Province
110	Adirondack Uplift
120	Atlantic Coast Basin
130	South Georgia-North Florida Sedimentary Province
140	South Florida Province
150	Piedmont-Blue Ridge Province
160	Appalachian Basin
200	Black Warrior Basin
210	Mid-Gulf Coast Basin
220	Gulf Coast Basin
230	Arkla Basin
240	Desha Basin
250	Upper Mississippi Embayment
260	East Texas Basin
300	Cincinnati Arch
305	Michigan Basin
310	Wisconsin Arch
315	Illinois Basin
320	Sioux Uplift
325	Iowa Shelf
330	Lincoln Anticline
335	Forest City Basin
340	Ozark Uplift
345	Arkoma Basin
350	South Oklahoma Folded Belt Province
355	Chautauqua Platform
360	Anadarko Basin
365	Cherokee Basin
370	Nemaha Anticline
375	Sedgwick Basin
380	Salina Basin
385	Central Kansas Uplift
390	Chadron Arch
395	Williston Basin
400	Ouachita Tectonic Belt Province
405	Kerr Basin
410	Llano Uplift
415	Strawn Basin

Code	Province
420	Fort Worth Syncline
425	Bend Arch
430	Permian Basin
435	Palo Duro Basin
440	Amarillo Arch
445	Sierra Grande Uplift
450	Las Animas Arch
455	Las Vegas-Raton Basin
460	Estancia Basin
465	Orogrande Basin
470	Pedregosa Basin
475	Basin-and-Range Province
500	Sweetgrass Arch
505	Montana Folded Belt Province
510	Central Montana Uplift
515	Powder River Basin
520	Big Horn Basin
525	Yellowstone Province
530	Wind River Basin
535	Green River Basin
540	Denver Basin
545	North Park Basin
550	South Park Basin
555	Eagle Basin
560	San Luis Basin
565	San Juan Mountain Province
570	Uinta Uplift
575	Uinta Basin
580	San Juan Basin
585	Paradox Basin
590	Black Mesa Basin
595	Piceance Basin
600	Northern Cascade Range-Okanagan Province
605	Eastern Columbia Basin
610	Idaho Mountains Province
615	Snake River Basin
620	Southern Oregon Basin
625	Great Basin Province

Code	Province
630	Wasatch Uplift
635	Plateau Sedimentary Province
640	Mojave Basin
645	Salton Basin
650	Sierra Nevada Province
700	Bellingham Basin
705	Puget Sound Province
710	Western Columbia Basin
715	Klamath Mountains Province
720	Eel River Basin
725	Northern Coast Range Province
730	Sacramento Basin
735	Santa Cruz Basin
740	Coastal Basins
745	San Joaquin Basin
750	Santa Maria Basin
755	Ventura Basin
760	Los Angeles Basin
765	Capistrano Basin
800	Heceta Island Area
805	Keku Islands Area
810	Gulf of Alaska Basin
815	Copper River Basin
820	Cook Inlet Basin
830	Kandik Province
835	Kobuk Province
840	Koyukuk Province
845	Bristol Bay Basin
850	Bethel Basin
855	Norton Basin
860	Selawik Basin
863	Yukon Flats Basin
865	Lower Tanana Basin
867	Middle Tanana Basin
870	Upper Tanana Basin
873	Galena Basin
875	Innoko Basin
877	Minchumina Basin

Code	Province
880	Holitna Basin
885	Arctic Foothills Province
890	Arctic Slope Basin
900	Maine Atlantic offshore–general
901	Maine Atlantic offshore–State
902	Maine Atlantic offshore–Federal
903	New Hampshire Atlantic offshore–general
904	New Hampshire Atlantic offshore–State
905	New Hampshire Atlantic offshore–Federal
906	Massachusetts Atlantic offshore–general
907	Massachusetts Atlantic offshore–State
908	Massachusetts Atlantic offshore–Federal
909	Rhode Island Atlantic offshore–general
910	Rhode Island Atlantic offshore–State
911	Rhode Island Atlantic offshore–Federal
912	Connecticut Atlantic off shore–general
913	Connecticut Atlantic offshore–State
914	Connecticut Atlantic offshore–Federal
915	New York Atlantic offshore–general
916	New York Atlantic offshore–State
917	New York Atlantic offshore–Federal
918	New Jersey Atlantic offshore–general
919	New Jersey Atlantic offshore–State
920	New Jersey Atlantic offshore–Federal
921	Delaware Atlantic offshore–general
922	Delaware Atlantic offshore–State
923	Delaware Atlantic offshore–Federal
924	Maryland Atlantic offshore–general
925	Maryland Atlantic offshore–State
926	Maryland Atlantic offshore–Federal
927	Virginia Atlantic offshore–general
928	Virginia Atlantic offshore–State
929	Virginia Atlantic offshore–Federal
930	North Carolina Atlantic offshore–general
931	North Carolina Atlantic offshore–State
932	North Carolina Atlantic offshore–Federal
933	South Carolina Atlantic offshore–general
934	South Carolina Atlantic offshore–State

Code	Province
935	South Carolina Atlantic offshore–Federal
936	Georgia Atlantic offshore–general
937	Georgia Atlantic offshore–State
938	Georgia Atlantic offshore–Federal
939	Florida Atlantic offshore–general
940	Florida Atlantic offshore–State
941	Florida Atlantic offshore–Federal
942	Florida Gulf of Mexico offshore–general
943	Florida Gulf of Mexico offshore–State
944	Florida Gulf of Mexico offshore–Federal
945	Alabama Gulf of Mexico offshore–general
946	Alabama Gulf of Mexico offshore–State
947	Alabama Gulf of Mexico offshore–Federal
948	Mississippi Gulf of Mexico offshore–general
949	Mississippi Gulf of Mexico offshore–State
950	Mississippi Gulf of Mexico offshore–Federal
951	Louisiana Gulf of Mexico offshore–general
952	Louisiana Gulf of Mexico offshore–State
953	Louisiana Gulf of Mexico offshore–Federal
954	Texas Gulf of Mexico offshore–general
955	Texas Gulf of Mexico offshore–State
956	Texas Gulf of Mexico offshore–Federal
957	California Pacific offshore–general
958	California Pacific offshore–State
959	California Pacific offshore–Federal
960	Oregon Pacific offshore–general
961	Oregon Pacific offshore–State
962	Oregon Pacific offshore–Federal
963	Washington Pacific offshore–general
964	Washington Pacific offshore–State
965	Washington Pacific offshore–Federal
972	Alaska Arctic offshore–general
973	Alaska Arctic offshore–State
974	Alaska Arctic offshore–Federal
975	Alaska Bering Sea offshore–general
976	Alaska Bering Sea offshore–State
977	Alaska Bering Sea offshore–Federal
978	Alaska Pacific offshore–general

Code	Province
979	Alaska Pacific offshore–State
980	Alaska Pacific offshore–Federal
987	Minnesota Lake Superior offshore
988	Wisconsin Lake Superior offshore
989	Michigan Lake Superior offshore
990	Indiana Lake Michigan offshore
991	Illinois Lake Michigan offshore
992	Wisconsin Lake Michigan offshore
993	Michigan Lake Michigan offshore
994	Michigan Lake Huron offshore
995	Michigan Lake Erie offshore
996	Ohio Lake Erie offshore
997	Pennsylvania Lake Erie offshore
998	New York Lake Erie offshore
999	New York Lake Ontario offshore

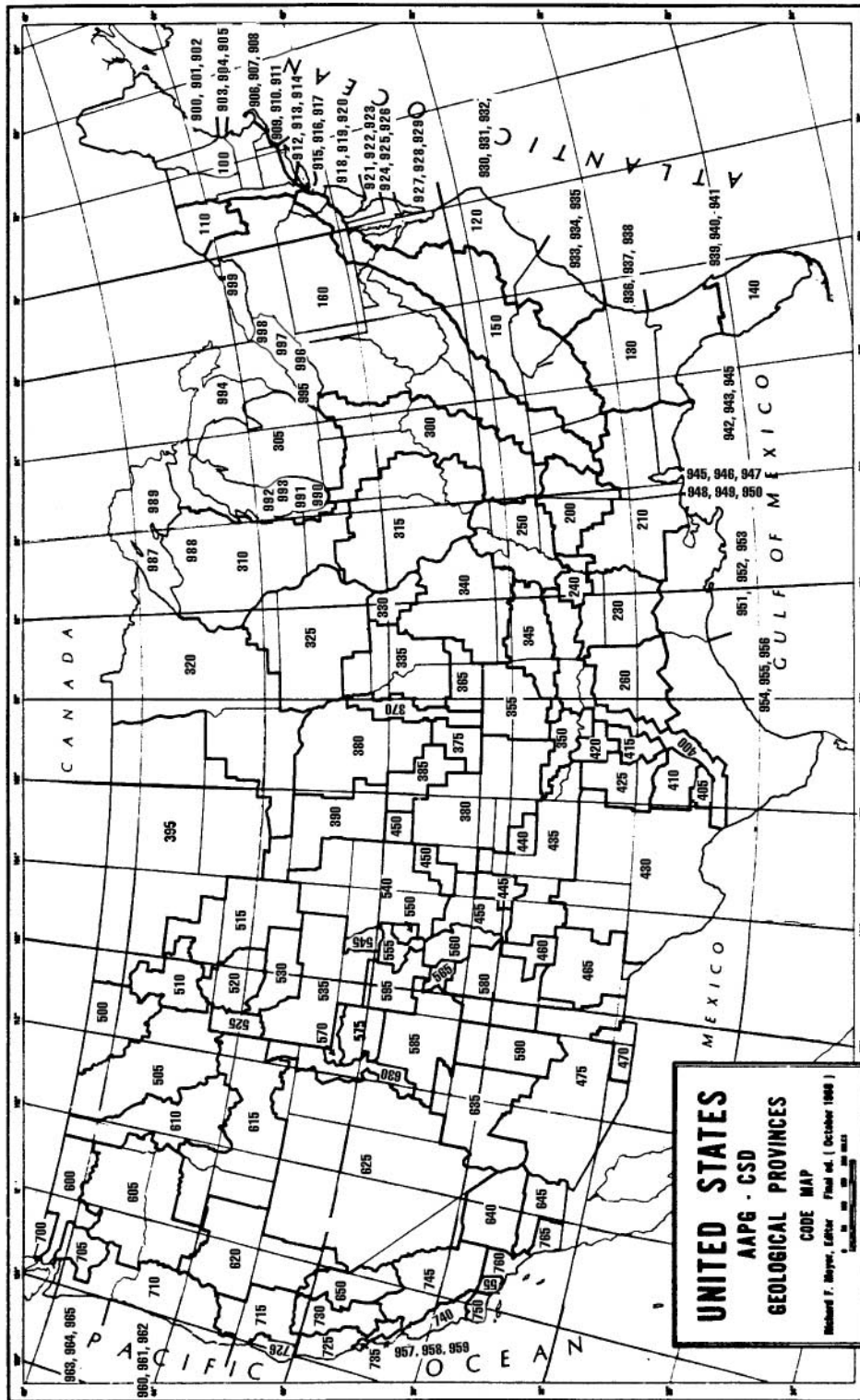


Figure 1. Geologic Provinces of the United States.

Table 1

*Samples from Gas and Oil Wells
in the United States*

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20044	COMPONENT, MOLE PCT
STATE _____	ARIZONA	METHANE _____ 0.1
COUNTY _____	APACHE	ETHANE _____ TRACE
FIELD _____	WILDCAT	PROPANE _____ TRACE
WELL NAME _____	STATE NO. 3-1	N-BUTANE _____ TRACE
API _____	0200120299	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 3, T11N, R29E	N-PENTANE _____ TRACE
OWNER _____	RIDGEWAY ARIZONA OIL CORP.	ISOPENTANE _____ 0.0
COMPLETED _____	950913	CYCLOPENTANE _____ --
SAMPLED _____	991220	HEXANES PLUS _____ 0.0
FORMATION _____	PERM-AMOS WASH	NITROGEN _____ 2.4
GEOLOGIC PROVINCE CODE _____	590	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1676	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	420	HYDROGEN SULFIDE** _____ TRACE
OPEN FLOW, MCFD _____	1347	CARBON DIOXIDE _____ 96.5
		HELIUM _____ 0.69
		HEATING VALUE* _____ 6
		SPECIFIC GRAVITY _____ 1.505
<hr/>		
SAMPLE	20918	COMPONENT, MOLE PCT
STATE _____	ARKANSAS	METHANE _____ 95.8
COUNTY _____	POPE	ETHANE _____ 1.0
FIELD _____	SILEX	PROPANE _____ 0.1
WELL NAME _____	SILEX 8-22-C	N-BUTANE _____ 0.0
API _____	0311510617	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 22, T10N, R21W	N-PENTANE _____ 0.0
OWNER _____	XTO ENERGY INC.	ISOPENTANE _____ 0.0
COMPLETED _____	001126	CYCLOPENTANE _____ --
SAMPLED _____	011029	HEXANES PLUS _____ 0.0
FORMATION _____	MISS-BOONE, DEVO-PENTERS	NITROGEN _____ 2.7
GEOLOGIC PROVINCE CODE _____	345	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4560	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	345	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	100	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.08
		HEATING VALUE* _____ 988
		SPECIFIC GRAVITY _____ 0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20008	COMPONENT, MOLE PCT
STATE	ARKANSAS	METHANE 95.6
COUNTY	YELL	ETHANE 2.0
FIELD	WAVELAND	PROPANE 0.2
WELL NAME	USA NO. 1-10	N-BUTANE TRACE
API	0314910013	ISOBUTANE 0.1
LOCATION	SEC. 10, T5N, R25W	N-PENTANE 0.0
OWNER	SEECO, INC.	ISOPENTANE 0.0
COMPLETED	971201	CYCLOPENTANE --
SAMPLED	980000	HEXANES PLUS 0.0
FORMATION	PENN-BORUM U&L	NITROGEN 0.7
GEOLOGIC PROVINCE CODE	345	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6754	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	1994	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	7752	CARBON DIOXIDE 1.2
		HELIUM 0.12
		HEATING VALUE* 1.013
		SPECIFIC GRAVITY 0.582

SAMPLE	20915	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 50.2
COUNTY	BACA	ETHANE 2.3
FIELD	GREENWOOD	PROPANE 1.5
WELL NAME	BRANDT O'NEILL UNIT 1	N-BUTANE 0.7
API	0600906220	ISOBUTANE 0.3
LOCATION	SEC. 16, T34S, R41W	N-PENTANE 0.2
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE 0.2
COMPLETED	920813	CYCLOPENTANE --
SAMPLED	011101	HEXANES PLUS 0.2
FORMATION	PERM-RED CAVE	NITROGEN 42.7
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	1260	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.4
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	338	CARBON DIOXIDE TRACE
		HELIUM 1.16
		HEATING VALUE* 646
		SPECIFIC GRAVITY 0.778

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20917	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 34.1
COUNTY _____	BACA	ETHANE _____ 1.7
FIELD _____	GREENWOOD	PROPANE _____ 0.9
WELL NAME _____	SEMINOLE 1-33	N-BUTANE _____ 0.4
API _____	0500906601	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 33, T34S, R41W	N-PENTANE _____ 0.1
OWNER _____	ENERGY ALLIANCE CO., INC.	ISOPENTANE _____ 0.2
COMPLETED _____	000212	CYCLOPENTANE _____ --
SAMPLED _____	011101	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 60.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1290	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	147	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 1.51
		HEATING VALUE* _____ 444
		SPECIFIC GRAVITY _____ 0.836

SAMPLE	20909	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 34.9
COUNTY _____	BACA	ETHANE _____ 1.1
FIELD _____	WALSH	PROPANE _____ 0.6
WELL NAME _____	GREENSBURG STATE 1-16	N-BUTANE _____ 0.2
API _____	0500906560	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 16, T33S, R43W	N-PENTANE _____ 0.1
OWNER _____	ENERGY ALLIANCE CO., INC.	ISOPENTANE _____ 0.1
COMPLETED _____	960118	CYCLOPENTANE _____ --
SAMPLED _____	011031	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 61.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1609	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	800	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 1.61
		HEATING VALUE* _____ 405
		SPECIFIC GRAVITY _____ 0.821

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20911	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	34.1
COUNTY	BACA	ETHANE	1.0
FIELD	SPELUNKER	PROPANE	0.6
WELL NAME	KITO 1-21	N-BUTANE	0.2
API	0500906589	ISOBUTANE	0.1
LOCATION	SEC. 21, T33S, R43W	N-PENTANE	0.1
OWNER	ENERGY ALLIANCE CO., INC.	ISOPENTANE	0.1
COMPLETED	981217	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.1
FORMATION	PERM-RED CAVE	NITROGEN	61.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1609	ARGON	0.2
MEASURED DEPTH		HYDROGEN	0.2
WELLHEAD PRESSURE, PSIG	62	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	480	CARBON DIOXIDE	0.1
		HELIUM	1.62
		HEATING VALUE*	397
		SPECIFIC GRAVITY	0.823
<hr/>			
SAMPLE	20912	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	35.3
COUNTY	BACA	ETHANE	1.1
FIELD	WALSH	PROPANE	0.6
WELL NAME	MCKINLEY 2-20	N-BUTANE	0.3
API	0500906564	ISOBUTANE	0.1
LOCATION	SEC. 20, T33S, R43W	N-PENTANE	0.1
OWNER	ENERGY ALLIANCE CO., INC.	ISOPENTANE	0.1
COMPLETED	950331	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.1
FORMATION	PERM-RED CAVE	NITROGEN	50.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1524	ARGON	0.2
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	487	CARBON DIOXIDE	0.1
		HELIUM	1.62
		HEATING VALUE*	415
		SPECIFIC GRAVITY	0.82

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20910	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 36.8
COUNTY _____	BACA	ETHANE _____ 1.1
FIELD _____	UNNAMED	PROPANE _____ 0.6
WELL NAME _____	ALLEY 2-17	N-BUTANE _____ 0.3
API _____	0500905569	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 17, T33S, R43W	N-PENTANE _____ 0.1
OWNER _____	ENERGY ALLIANCE CO. INC.	ISOPENTANE _____ 0.1
COMPLETED _____	961005	CYCLOPENTANE _____ --
SAMPLED _____	011031	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-RED CAVE, PENN-WABAUNSEE	NITROGEN _____ 58.9
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3079	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	322	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1391	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.65
		HEATING VALUE* _____ 430
		SPECIFIC GRAVITY _____ 0.814
<hr/>		
SAMPLE	20916	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 66.1
COUNTY _____	BACA	ETHANE _____ 6.5
FIELD _____	GREENWOOD	PROPANE _____ 4.0
WELL NAME _____	BURGHART A-1 LEASE	N-BUTANE _____ 1.3
API _____	0500905038	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 22, T34S, R41W	N-PENTANE _____ 0.4
OWNER _____	BEREXCO, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	560502	CYCLOPENTANE _____ --
SAMPLED _____	011101	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-TOPEKA	NITROGEN _____ 19.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2830	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1620	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.54
		HEATING VALUE* _____ 993
		SPECIFIC GRAVITY _____ 0.755

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20914	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 63.7
COUNTY	BACA	ETHANE 5.8
FIELD	MIDWAY	PROPANE 3.4
WELL NAME	LEACH 1-10	N-BUTANE 1.0
API	0500906397	ISOBUTANE 0.4
LOCATION	SEC. 10 T33S R42W	N-PENTANE 0.3
OWNER	SANGLIN OIL CORP.	ISOPENTANE 0.2
COMPLETED	991102	CYCLOPENTANE --
SAMPLED	011101	HEXANES PLUS 0.3
FORMATION	PENN-TOPEKA	NITROGEN 24.3
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3063	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	150	CARBON DIOXIDE 0.1
		HELIUM 0.62
		HEATING VALUE* 907
		SPECIFIC GRAVITY 0.748

SAMPLE	20906	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 57.8
COUNTY	BACA	ETHANE 5.5
FIELD	GREENWOOD	PROPANE 3.6
WELL NAME	MCCALL NO. 1-23	N-BUTANE 1.1
API	0500906544	ISOBUTANE 0.4
LOCATION	SEC. 23 T31S R42W	N-PENTANE 0.3
OWNER	ENERGY ALLIANCE CO. INC.	ISOPENTANE 0.2
COMPLETED	950426	CYCLOPENTANE --
SAMPLED	011031	HEXANES PLUS 0.3
FORMATION	PENN-TOPEKA	NITROGEN 29.8
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3264	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	368	CARBON DIOXIDE 0.1
		HELIUM 0.75
		HEATING VALUE* 860
		SPECIFIC GRAVITY 0.777

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20875	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	89.2
COUNTY	GAREFIELD	ETHANE	4.8
FIELD	PARACHUTE	PROPANE	1.0
WELL NAME	AMERICAN SODA GM 268-3	N-BUTANE	0.2
API	0504507313	ISOBUTANE	0.2
LOCATION	SEC. 3, T7S, R96W	N-PENTANE	0.1
OWNER	WILLIAMS PRODUCTION BMT CO.	ISOPENTANE	0.1
COMPLETED	000809	CYCLOPENTANE	--
SAMPLED	011015	HEXANES PLUS	0.2
FORMATION	CRET-MESAVERDE	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6266	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	2000	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1128	CARBON DIOXIDE	4.0
		HELIUM	0.01
		HEATING VALUE*	1.041
		SPECIFIC GRAVITY	0.639

SAMPLE	20812	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	88.7
COUNTY	MESA	ETHANE	6.3
FIELD	BRONCO FLATS	PROPANE	2.4
WELL NAME	SULFUR GULCH 9-98-10	N-BUTANE	0.5
API	0507708682	ISOBUTANE	0.3
LOCATION	SEC. 10, T9S, R98W	N-PENTANE	0.1
OWNER	MARALEX RESOURCES, INC.	ISOPENTANE	0.1
COMPLETED	950225	CYCLOPENTANE	--
SAMPLED	010828	HEXANES PLUS	0.2
FORMATION	CRET-CAMEO	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3052	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	368	CARBON DIOXIDE	1.0
		HELIUM	0.03
		HEATING VALUE*	1.116
		SPECIFIC GRAVITY	0.64

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20811	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>91.5</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>4.0</u>
FIELD _____	<u>BRONCO FLATS</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>SULFUR GULCH 9-9B-2</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>0507708709</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 2, T9S, R98W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>MARALEX RESOURCES, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>000518</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-CAMEO COAL</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2600</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>20</u>	CARBON DIOXIDE _____ <u>1.8</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.061</u>
		SPECIFIC GRAVITY _____ <u>0.619</u>
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SAMPLE	20796	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>94.3</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>2.3</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>FEDERAL 1-3</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0507708192</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 1, T10S, R97W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>ROCKY MOUNTAIN OPERATING CO., INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>791129</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010827</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-CORCORAN</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3262</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>0</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1057</u>	CARBON DIOXIDE _____ <u>2.4</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.020</u>
		SPECIFIC GRAVITY _____ <u>0.599</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20800	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 87.9
COUNTY _____	MESA	ETHANE _____ 6.5
FIELD _____	SHIRE GULCH	PROPANE _____ 2.3
WELL NAME _____	FEDERAL 35-1	N-BUTANE _____ 0.6
API _____	0507708178	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 35, T9S, R97W	N-PENTANE _____ 0.2
OWNER _____	ROCKY MOUNTAIN OPERATING CO., INC.	ISOPENTANE _____ 0.2
COMPLETED _____	791226	CYCLOPENTANE _____ --
SAMPLED _____	010827	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-CORCORAN	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3072	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	0	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1000	CARBON DIOXIDE _____ 1.2
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.124
		SPECIFIC GRAVITY _____ 0.651
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SAMPLE	20816	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 87.5
COUNTY _____	MESA	ETHANE _____ 7.1
FIELD _____	BRONCO FLATS	PROPANE _____ 2.6
WELL NAME _____	WAGON TRACK FEDERAL 12-16	N-BUTANE _____ 0.6
API _____	0507708700	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 12, T9S, R98W	N-PENTANE _____ 0.2
OWNER _____	BLACK HILLS EXPL. & PROD. INC.	ISOPENTANE _____ 0.2
COMPLETED _____	961226	CYCLOPENTANE _____ --
SAMPLED _____	010828	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-CORCORAN	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2879	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	433	CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.137
		SPECIFIC GRAVITY _____ 0.65

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20815	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>88.5</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>6.8</u>
FIELD _____	<u>BRONCO FLATS</u>	PROPANE _____ <u>2.2</u>
WELL NAME _____	<u>WAGON TRACK FEDERAL 12-14</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>0507708699</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 12, T9S, R98W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BLACK HILLS EXPL. & PROD. INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>961228</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-CORCORAN</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2854</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>475</u>	CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.131</u>
		SPECIFIC GRAVITY _____ <u>0.642</u>

SAMPLE	20819	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>92.5</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>2.0</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>HORSESHOE CANYON 4-21</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0507708486</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 21, T9S, R97W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>830218</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-CORCORAN, DAKOTA</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7671</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>100</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2947</u>	CARBON DIOXIDE _____ <u>4.2</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>999</u>
		SPECIFIC GRAVITY _____ <u>0.617</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 50 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20803	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 89.8
COUNTY _____	MESA	ETHANE _____ 4.6
FIELD _____	SHIRE GULCH	PROPANE _____ 1.6
WELL NAME _____	HORSESHOE CANYON 3	N-BUTANE _____ 0.4
API _____	0507708656	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 28, T9S, R97W	N-PENTANE _____ 0.1
OWNER _____	KOCH EXPLORATION CO. LLC	ISOPENTANE _____ 0.1
COMPLETED _____	930315	CYCLOPENTANE _____ --
SAMPLED _____	010827	HEXANES PLUS _____ 0.2
FORMATION _____	CRET-COZZETTE	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2902	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	360	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	501	CARBON DIOXIDE _____ 2.1
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1,071
		SPECIFIC GRAVITY _____ 0.634

SAMPLE	20814	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 87.3
COUNTY _____	MESA	ETHANE _____ 7.1
FIELD _____	BRONCO FLATS	PROPANE _____ 2.7
WELL NAME _____	WAGON TRAIL FEDERAL 44-11	N-BUTANE _____ 0.7
API _____	0507708606	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 11, T9S, R98W	N-PENTANE _____ 0.1
OWNER _____	BLACK HILLS EXPL. & PROD. INC.	ISOPENTANE _____ 0.2
COMPLETED _____	911220	CYCLOPENTANE _____ --
SAMPLED _____	010828	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-COZZETTE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2790	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1300	CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1,139
		SPECIFIC GRAVITY _____ 0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20820	COMPONENT, MOLE PCT	
STATE	COLOBADO	METHANE	89.1
COUNTY	MESA	ETHANE	6.5
FIELD	SHIRE GULCH	PROPANE	2.2
WELL NAME	HORSESHOE CANYON 2-22	N-BUTANE	0.5
API	0507708654	ISOBUTANE	0.3
LOCATION	SEC. 22 T9S R97W	N-PENTANE	0.1
OWNER	KOCH EXPLORATION CO. LLC	ISOPENTANE	0.1
COMPLETED	930105	CYCLOPENTANE	-
SAMPLED	010828	HEXANES PLUS	0.1
FORMATION	CRET-COZZETTE CORCORAN	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3175	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	905	CARBON DIOXIDE	1.0
		HELIUM	0.01
		HEATING VALUE*	1.109
		SPECIFIC GRAVITY	0.634

SAMPLE	20817	COMPONENT, MOLE PCT	
STATE	COLOBADO	METHANE	89.5
COUNTY	MESA	ETHANE	5.8
FIELD	SHIRE GULCH	PROPANE	1.9
WELL NAME	HORSESHOE CANYON 3-16	N-BUTANE	0.5
API	0507708660	ISOBUTANE	0.3
LOCATION	SEC. 16 T9S R97W	N-PENTANE	0.1
OWNER	KOCH EXPLORATION CO. LLC	ISOPENTANE	0.1
COMPLETED	930108	CYCLOPENTANE	-
SAMPLED	010828	HEXANES PLUS	0.3
FORMATION	CRET-COZZETTE CORCORAN	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3190	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	300	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1357	CARBON DIOXIDE	1.2
		HELIUM	0.02
		HEATING VALUE*	1.104
		SPECIFIC GRAVITY	0.635

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20818	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 89.6
COUNTY _____	MESA	ETHANE _____ 5.7
FIELD _____	SHIRE GULCH	PROPANE _____ 1.9
WELL NAME _____	HORSESHOE CANYON 1-16	N-BUTANE _____ 0.5
API _____	0507708650	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 16, T9S, R97W	N-PENTANE _____ 0.1
OWNER _____	KOCH EXPLORATION CO., LLC	ISOPENTANE _____ 0.2
COMPLETED _____	921216	CYCLOPENTANE _____ --
SAMPLED _____	010828	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-COZZETTE, CORCORAN	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3165	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	310	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	745	CARBON DIOXIDE _____ 1.3
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.106
		SPECIFIC GRAVITY _____ 0.637

SAMPLE	20824	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 89.7
COUNTY _____	MESA	ETHANE _____ 5.7
FIELD _____	SHIRE GULCH	PROPANE _____ 1.9
WELL NAME _____	HORSESHOE CANYON 3-27	N-BUTANE _____ 0.5
API _____	0507708655	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 27, T9S, R97W	N-PENTANE _____ 0.1
OWNER _____	KOCH EXPLORATION CO., LLC	ISOPENTANE _____ 0.2
COMPLETED _____	921229	CYCLOPENTANE _____ --
SAMPLED _____	010828	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-COZZETTE, CORCORAN	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3091	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	380	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	425	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.110
		SPECIFIC GRAVITY _____ 0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20825	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	89.4
COUNTY	MESA	ETHANE	5.8
FIELD	ROBERTS CANYON	PROPANE	2.0
WELL NAME	HORSESHOE CANYON 1-27	N-BUTANE	0.5
API	0507708863	ISOBUTANE	0.3
LOCATION	SEC. 27, T9S, R97W	N-PENTANE	0.1
OWNER	KOCH EXPLORATION CO., LLC	ISOPENTANE	0.2
COMPLETED	930125	CYCLOPENTANE	—
SAMPLED	010828	HEXANES PLUS	0.3
FORMATION	CRET-COZZETTE CORCORAN	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3126	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	185	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	555	CARBON DIOXIDE	1.1
		HELIUM	0.03
		HEATING VALUE*	1.112
		SPECIFIC GRAVITY	0.638

SAMPLE	20823	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	88.2
COUNTY	MESA	ETHANE	6.4
FIELD	SHIRE GULCH	PROPANE	2.3
WELL NAME	HORSESHOE CANYON 2-17	N-BUTANE	0.6
API	0507708851	ISOBUTANE	0.4
LOCATION	SEC. 17, T9S, R97W	N-PENTANE	0.2
OWNER	KOCH EXPLORATION CO., LLC	ISOPENTANE	0.2
COMPLETED	930112	CYCLOPENTANE	—
SAMPLED	010828	HEXANES PLUS	0.3
FORMATION	CRET-COZZETTE CORCORAN	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2978	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	580	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4286	CARBON DIOXIDE	1.0
		HELIUM	0.04
		HEATING VALUE*	1.127
		SPECIFIC GRAVITY	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20806	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>92.8</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>1.8</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>HORSESHOE CANYON 3-29</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0507708658</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 29, T9S, R97W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>921214</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>010827</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-COZZETTE, DAKOTA</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7203</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>300</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1953</u>	CARBON DIOXIDE _____ <u>4.2</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>994</u>
		SPECIFIC GRAVITY _____ <u>0.614</u>
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SAMPLE	20822	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>90.6</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>3.4</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>HORSESHOE CANYON 2-20</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>0507708645</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 20, T9S, R97W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>930222</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-CZZT, CRR, DKOT</u>	NITROGEN _____ <u>0.5</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7575</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>830</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1728</u>	CARBON DIOXIDE _____ <u>3.5</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1,034</u>
		SPECIFIC GRAVITY _____ <u>0.631</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20821	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	85.7
COUNTY	MESA	ETHANE	3.0
FIELD	SHIRE GULCH	PROPANE	0.9
WELL NAME	HORSESHOE CANYON 1-21	N-BUTANE	0.2
API	0507708456	ISOBUTANE	0.2
LOCATION	SEC. 21, T9S, R97W	N-PENTANE	0.1
OWNER	KOCH EXPLORATION CO., LLC	ISOPENTANE	0.1
COMPLETED	820630	CYCLOPENTANE	-
SAMPLED	010828	HEXANES PLUS	0.1
FORMATION	CRET-CZZT, CRCR, DKOT	NITROGEN	0.9
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7744	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	300	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3403	CARBON DIOXIDE	8.8
		HELIUM	0.09
		HEATING VALUE*	967
		SPECIFIC GRAVITY	0.677

SAMPLE	20802	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	89.9
COUNTY	MESA	ETHANE	4.6
FIELD	SHIRE GULCH	PROPANE	1.7
WELL NAME	HORSESHOE CANYON 1-33	N-BUTANE	0.4
API	0507708426	ISOBUTANE	0.2
LOCATION	SEC. 33, T9S, R97W	N-PENTANE	0.1
OWNER	KOCH EXPLORATION CO., LLC	ISOPENTANE	0.1
COMPLETED	820201	CYCLOPENTANE	-
SAMPLED	010827	HEXANES PLUS	0.2
FORMATION	CRET-DAKOTA	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7098	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	50	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	685	CARBON DIOXIDE	2.2
		HELIUM	0.03
		HEATING VALUE*	1,075
		SPECIFIC GRAVITY	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 80 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20804	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	85.8
COUNTY	MESA	ETHANE	6.1
FIELD	SHIRE GULCH	PROPANE	3.1
WELL NAME	HORSESHOE CANYON 2-29	N-BUTANE	1.2
API	0507708657	ISOBUTANE	0.9
LOCATION	SEC. 29, T9S, R97W	N-PENTANE	0.3
OWNER	KOCH EXPLORATION CO., LLC	ISOPENTANE	0.5
COMPLETED	930301	CYCLOPENTANE	--
SAMPLED	010827	HEXANES PLUS	0.4
FORMATION	CRET-DAKOTA	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7172	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	430	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2106	CARBON DIOXIDE	1.2
		HELIUM	0.09
		HEATING VALUE*	1.176
		SPECIFIC GRAVITY	0.682

SAMPLE	20809	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	90.5
COUNTY	MESA	ETHANE	4.0
FIELD	PLATEAU	PROPANE	0.8
WELL NAME	NICHOLS 2-26	N-BUTANE	0.2
API	0507708332	ISOBUTANE	0.2
LOCATION	SEC. 26, T10S, R97W	N-PENTANE	TRACE
OWNER	ROCKY MOUNTAIN OPERATING CO., INC.	ISOPENTANE	0.1
COMPLETED	810527	CYCLOPENTANE	--
SAMPLED	010828	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7687	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	0	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	885	CARBON DIOXIDE	3.6
		HELIUM	0.09
		HEATING VALUE*	1.029
		SPECIFIC GRAVITY	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20795	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>93.2</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>0.9</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>BLAIR NO. 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>0507708156</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC. 1, T10S, R97W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>ROCKY MOUNTAIN OPERATING CO., INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>790502</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>010827</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-DAKOTA FRONTIER</u>	NITROGEN _____ <u>1.6</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7412</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>0</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>230</u>	CARBON DIOXIDE _____ <u>4.0</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>965</u>
		SPECIFIC GRAVITY _____ <u>0.605</u>
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SAMPLE	20813	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>95.5</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>1.5</u>
FIELD _____	<u>BRONCO FLATS</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>WAGON TRAIL NO. 1-3</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>0507708672</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 3, T9S, R98W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>MARALEX RESOURCES, INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>950511</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2226</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>290</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>300</u>	CARBON DIOXIDE _____ <u>2.6</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1,002</u>
		SPECIFIC GRAVITY _____ <u>0.591</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20805	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>85.9</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>6.1</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>3.1</u>
WELL NAME _____	<u>HORSESHOE CANYON 2-29</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>0507708657</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC. 29, T9S, R97W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>KOCH EXPLORATION CO. LLC</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>930301</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010827</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2506</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>1350</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1051</u>	CARBON DIOXIDE _____ <u>1.2</u>
		HELIUM _____ <u>0.09</u>
		HEATING VALUE* _____ <u>1.176</u>
		SPECIFIC GRAVITY _____ <u>0.682</u>
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SAMPLE	20735	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>83.1</u>
COUNTY _____	<u>BARBER</u>	ETHANE _____ <u>3.7</u>
FIELD _____	<u>MEDICINE LODGE-BOGGS</u>	PROPANE _____ <u>2.1</u>
WELL NAME _____	<u>RICKE NO. 2</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>1500722610</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 29, T33S, R13W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CLARK EXPLORATION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>000229</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010712</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PENN-SNYDERVILLE</u>	NITROGEN _____ <u>9.1</u>
GEOLOGIC PROVINCE CODE _____	<u>375</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3990</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>520</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2022</u>	CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.27</u>
		HEATING VALUE* _____ <u>1.020</u>
		SPECIFIC GRAVITY _____ <u>0.659</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20405	COMPONENT MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.5</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>CARLTON A1-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1505521445</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 6, T26S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>960423</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>000815</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>16.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2668</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>66</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>156</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.006</u>
		SPECIFIC GRAVITY _____ <u>0.721</u>
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SAMPLE	20406	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.5</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>5.9</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.1</u>
WELL NAME _____	<u>JONES 6-2</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1505521506</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 29, T26S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>970304</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>000815</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>17.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2726</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>98</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>320</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.44</u>
		HEATING VALUE* _____ <u>977</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20004	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>61.2</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>4.7</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>2.5</u>
WELL NAME _____	<u>JACKSON, ALVIN NO. 2-33</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>1505521564</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 33, T22S, R32W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CROSS TIMBERS OPERATING CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>970829</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>980127</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>29.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2702</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>70</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>406</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.65</u>
		HEATING VALUE* _____ <u>817</u>
		SPECIFIC GRAVITY _____ <u>0.744</u>
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SAMPLE	20404	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.5</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>5.3</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>CARLTON B-1</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1505520270</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 6, T26S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>780216</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000815</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>16.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2950</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>174</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>998</u>
		SPECIFIC GRAVITY _____ <u>0.719</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20407	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>70.9</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>6.0</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>BROWN C1</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1505520304</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 34, T25S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>789726</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>009817</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>17.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2891</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>279</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.44</u>
		HEATING VALUE* _____ <u>975</u>
		SPECIFIC GRAVITY _____ <u>0.717</u>

SAMPLE	20288	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.0</u>
COUNTY _____	<u>GRANT</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>MEYERS 2-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1506720511</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 17, T27S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>SAMEDAN OIL CORP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>780119</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>14.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2846</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>4100</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1,021</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20287	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.9
COUNTY _____	GRANT	ETHANE _____ 6.5
FIELD _____	PANOMA	PROPANE _____ 3.4
WELL NAME _____	MEYERS 1-2	N-BUTANE _____ 1.0
API _____	1506720563	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 9, T27S, R35W	N-PENTANE _____ 0.2
OWNER _____	SAMEDAN OIL CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	791213	CYCLOPENTANE _____ -
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 14.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2840	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	4200	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.42
		HEATING VALUE* _____ 1.020
		SPECIFIC GRAVITY _____ 0.714
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SAMPLE	20437	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 64.8
COUNTY _____	HASKELL	ETHANE _____ 5.1
FIELD _____	HUGOTON	PROPANE _____ 2.7
WELL NAME _____	GUNNELL 1-2	N-BUTANE _____ 0.8
API _____	1508121175	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 11, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.1
COMPLETED _____	980414	CYCLOPENTANE _____ -
SAMPLED _____	001107	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 23.3
GEOLOGIC PROVINCE CODE _____	350	OXYGEN _____ 2.2
TRUE VERTICAL DEPTH (FT) _____	2652	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	134	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	257	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.36
		HEATING VALUE* _____ 866
		SPECIFIC GRAVITY _____ 0.737

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20444	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>70.7</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>JONES 11-2</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>1508121095</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 8, T27S, R34W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>970902</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>16.0</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2694</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>137</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>249</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.38</u>
		HEATING VALUE* _____ <u>1.022</u>
		SPECIFIC GRAVITY _____ <u>0.735</u>
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SAMPLE	20442	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.9</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>5.8</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>JONES 9</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1508100354</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 4, T27S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>460136</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>17.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2740</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>418</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>254</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>968</u>
		SPECIFIC GRAVITY _____ <u>0.711</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20443	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.9
COUNTY _____	HASKELL	ETHANE _____ 5.8
FIELD _____	HUGOTON	PROPANE _____ 3.1
WELL NAME _____	JONES 9-2	N-BUTANE _____ 0.9
API _____	1508121110	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 4, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	970602	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 17.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2695	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	129	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	330	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.42
		HEATING VALUE* _____ 971
		SPECIFIC GRAVITY _____ 0.712

SAMPLE	20440	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.8
COUNTY _____	HASKELL	ETHANE _____ 5.8
FIELD _____	HUGOTON	PROPANE _____ 3.1
WELL NAME _____	JONES 12-2	N-BUTANE _____ 0.9
API _____	1508120758	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 10, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	930413	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 17.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2701	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	277	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.43
		HEATING VALUE* _____ 970
		SPECIFIC GRAVITY _____ 0.712

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20436	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.2
COUNTY _____	HASKELL	ETHANE _____ 5.6
FIELD _____	HUGOTON	PROPANE _____ 2.9
WELL NAME _____	GUNNELL 1	N-BUTANE _____ 0.8
API _____	1508100349	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 2, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.1
COMPLETED _____	450831	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 17.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2766	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	420	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	333	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.45
		HEATING VALUE* _____ 958
		SPECIFIC GRAVITY _____ 0.707
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SAMPLE	20446	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.0
COUNTY _____	HASKELL	ETHANE _____ 5.5
FIELD _____	HUGOTON	PROPANE _____ 2.9
WELL NAME _____	GOVERNMENT 3-2	N-BUTANE _____ 0.8
API _____	1508121007	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 12, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.1
COMPLETED _____	990726	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 17.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2762	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	203	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.46
		HEATING VALUE* _____ 954
		SPECIFIC GRAVITY _____ 0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20447	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.9</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>5.4</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>2.8</u>
WELL NAME _____	<u>GOVERNMENT 3</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1508100288</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 12, T27S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>490727</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>17.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2770</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>172</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.49</u>
		HEATING VALUE* _____ <u>946</u>
		SPECIFIC GRAVITY _____ <u>0.706</u>
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SAMPLE	20439	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>68.9</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>5.6</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>2.9</u>
WELL NAME _____	<u>JONES U1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1508120133</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 10, T27S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>781012</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>19.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>1.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2858</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>201</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>925</u>
		SPECIFIC GRAVITY _____ <u>0.722</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20438	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.0
COUNTY _____	HASKELL	ETHANE _____ 5.7
FIELD _____	PANOMA	PROPANE _____ 3.0
WELL NAME _____	GUNNELL A-1	N-BUTANE _____ 0.8
API _____	1508120157	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 2, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.1
COMPLETED _____	790227	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 17.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2938	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	256	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	109	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.43
		HEATING VALUE* _____ 962
		SPECIFIC GRAVITY _____ 0.709

SAMPLE	20441	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.7
COUNTY _____	HASKELL	ETHANE _____ 5.9
FIELD _____	PANOMA	PROPANE _____ 3.1
WELL NAME _____	JONES K-1	N-BUTANE _____ 0.9
API _____	1508120103	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 7, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	771215	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 17.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2912	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	248	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	213	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.44
		HEATING VALUE* _____ 971
		SPECIFIC GRAVITY _____ 0.713

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20445	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.0
COUNTY _____	HASKELL	ETHANE _____ 5.5
FIELD _____	PANOMA	PROPANE _____ 2.9
WELL NAME _____	GOVERNMENT A-3	N-BUTANE _____ 0.8
API# _____	1508120175	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 12, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.1
COMPLETED _____	800318	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 17.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2922	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	294	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.48
		HEATING VALUE* _____ 954
		SPECIFIC GRAVITY _____ 0.707

SAMPLE	50574	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 77.4
COUNTY _____	HASKELL	ETHANE _____ 5.5
FIELD _____	EUBANK S	PROPANE _____ 3.9
WELL NAME _____	ADAMS 'L' NO. 2	N-BUTANE _____ 2.0
API# _____	1508121093	ISOBUTANE _____ 0.9
LOCATION _____	SEC. 33, T29S, R34W	N-PENTANE _____ 0.8
OWNER _____	ANADARKO PETROLEUM CORP.	ISOPENTANE _____ 0.7
COMPLETED _____	970221	CYCLOPENTANE _____ --
SAMPLED _____	970911	HEXANES PLUS _____ 2.0
FORMATION _____	PENN-MOIRROW	NITROGEN _____ 5.9
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5296	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ --
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	77.0	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.63
		HEATING VALUE* _____ 1,246
		SPECIFIC GRAVITY _____ 0.767

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20060	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.7
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.8
WELL NAME _____	JOHNSON 4B-19	N-BUTANE _____ 1.2
API _____	1509321372	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 19, T25S, R36W	N-PENTANE _____ 0.2
OWNER _____	OSBORN HEIRS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	941020	CYCLOPENTANE _____ -
SAMPLED _____	000413	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2586	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	39	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	305	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.37
		HEATING VALUE* _____ 1.023
		SPECIFIC GRAVITY _____ 0.725
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SAMPLE	20059	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.5
COUNTY _____	KEARNY	ETHANE _____ 6.6
FIELD _____	HUGOTON	PROPANE _____ 3.8
WELL NAME _____	JOHNSON 4-19	N-BUTANE _____ 1.2
API _____	1509300320	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 19, T25S, R36W	N-PENTANE _____ 0.2
OWNER _____	OSBORN HEIRS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	481027	CYCLOPENTANE _____ -
SAMPLED _____	000413	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 14.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2555	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	39	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.38
		HEATING VALUE* _____ 1.036
		SPECIFIC GRAVITY _____ 0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20305	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	73.0
COUNTY	KEARNY	ETHANE	6.5
FIELD	HUGOTON	PROPANE	3.3
WELL NAME	TATE 4-L	N-BUTANE	1.0
API	1509320911	ISOBUTANE	0.4
LOCATION	SEC. 11, T26S, R36W	N-PENTANE	0.2
OWNER	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE	0.2
COMPLETED	880128	CYCLOPENTANE	--
SAMPLED	000620	HEXANES PLUS	0.2
FORMATION	PERM-CHASE GROUP	NITROGEN	14.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2710	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	157	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	766	CARBON DIOXIDE	TRACE
		HELIUM	0.39
		HEATING VALUE*	1.017
		SPECIFIC GRAVITY	0.714
SAMPLE	20307	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	73.1
COUNTY	KEARNY	ETHANE	6.5
FIELD	HUGOTON	PROPANE	3.3
WELL NAME	TATE 8-L	N-BUTANE	1.0
API	1509320909	ISOBUTANE	0.4
LOCATION	SEC. 23, T26S, R36W	N-PENTANE	0.2
OWNER	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE	0.2
COMPLETED	871231	CYCLOPENTANE	--
SAMPLED	000520	HEXANES PLUS	0.2
FORMATION	PERM-CHASE GROUP	NITROGEN	14.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2762	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	183	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	889	CARBON DIOXIDE	TRACE
		HELIUM	0.39
		HEATING VALUE*	1.018
		SPECIFIC GRAVITY	0.713

* CALCULATED GROSS BBL PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20301	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.6
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	HUGOTON	PROPANE _____ 3.4
WELL NAME _____	MASONIC HOME 2-I	N-BUTANE _____ 1.0
API _____	1509321264	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 6, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE _____ 0.2
COMPLETED _____	930710	CYCLOPENTANE _____ ..
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2716	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	153	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.014
		SPECIFIC GRAVITY _____ 0.716

SAMPLE	20303	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.2
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.6
WELL NAME _____	TATE 3	N-BUTANE _____ 1.1
API _____	1509300514	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 13, T26S, R36W	N-PENTANE _____ 0.3
OWNER _____	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE _____ 0.2
COMPLETED _____	491019	CYCLOPENTANE _____ ..
SAMPLED _____	000620	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2632	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	402	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1949	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.025
		SPECIFIC GRAVITY _____ 0.721

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20308	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	73.0
COUNTY	KEARNY	ETHANE	6.5
FIELD	HUGOTON	PROPANE	3.3
WELL NAME	TATE B	N-BUTANE	1.0
API	1509300524	ISOBUTANE	0.4
LOCATION	SEC. 23, T26S, R35W	N-PENTANE	0.2
OWNER	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE	0.2
COMPLETED	501011	CYCLOPENTANE	--
SAMPLED	000620	HEXANES PLUS	0.2
FORMATION	PERM-CHASE GROUP	NITROGEN	14.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2688	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	409	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2587	CARBON DIOXIDE	TRACE
		HELIUM	0.40
		HEATING VALUE*	1.021
		SPECIFIC GRAVITY	0.714

SAMPLE	20302	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	72.5
COUNTY	KEARNY	ETHANE	6.4
FIELD	HUGOTON	PROPANE	3.2
WELL NAME	MASONIC HOME 2	N-BUTANE	1.0
API	1509300468	ISOBUTANE	0.4
LOCATION	SEC. 6, T26S, R35W	N-PENTANE	0.2
OWNER	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE	0.2
COMPLETED	380928	CYCLOPENTANE	--
SAMPLED	000620	HEXANES PLUS	0.2
FORMATION	PERM-CHASE GROUP	NITROGEN	15.3
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2690	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	430	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	7000	CARBON DIOXIDE	TRACE
		HELIUM	0.40
		HEATING VALUE*	1.008
		SPECIFIC GRAVITY	0.715

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20310	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 73.1
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOION	PROPANE _____ 3.3
WELL NAME _____	TATE 9-1	N-BUTANE _____ 1.0
API _____	1509321032	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 28, T26S, R36W	N-PENTANE _____ 0.2
OWNER _____	WILLIAMS PRODUCTION RMT. CO.	ISOPENTANE _____ 0.2
COMPLETED _____	980724	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 14.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2773	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	177	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	670	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.019
		SPECIFIC GRAVITY _____ 0.713

SAMPLE	20282	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.4
COUNTY _____	KEARNY	ETHANE _____ 6.7
FIELD _____	HUGOION	PROPANE _____ 4.0
WELL NAME _____	WHITE 2-2	N-BUTANE _____ 1.1
API _____	1509321509	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 12, T26S, R35W	N-PENTANE _____ 0.3
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	980728	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 14.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2692	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	118	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	287	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.046
		SPECIFIC GRAVITY _____ 0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20300	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	72.3
COUNTY	KEARNY	ETHANE	6.5
FIELD	HUGOTON	PROPANE	3.6
WELL NAME	MASONIC HOME 2-I	N-BUTANE	1.0
API	1509321264	ISOBUTANE	0.4
LOCATION	SEC. 6 T26S R35W	N-PENTANE	0.2
OWNER	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE	0.2
COMPLETED	930710	CYCLOPENTANE	--
SAMPLED	000620	HEXANES PLUS	0.2
FORMATION	PERM-CHASE GROUP	NITROGEN	15.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2716	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	153	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	TRACE
		HELIUM	0.40
		HEATING VALUE*	1.018
		SPECIFIC GRAVITY	0.718

SAMPLE	20306	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	72.5
COUNTY	KEARNY	ETHANE	6.5
FIELD	HUGOTON	PROPANE	3.5
WELL NAME	TATE 4	N-BUTANE	1.1
API	1509300512	ISOBUTANE	0.4
LOCATION	SEC. 11 T26S R36W	N-PENTANE	0.3
OWNER	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE	0.2
COMPLETED	491130	CYCLOPENTANE	--
SAMPLED	000620	HEXANES PLUS	0.2
FORMATION	PERM-CHASE GROUP	NITROGEN	14.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2627	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	406	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2300	CARBON DIOXIDE	TRACE
		HELIUM	0.40
		HEATING VALUE*	1.023
		SPECIFIC GRAVITY	0.718

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20298	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.7
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.3
WELL NAME _____	MASONIC HOME 6	N-BUTANE _____ 1.0
API _____	1509300501	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 2, T26S, R36W	N-PENTANE _____ 0.2
OWNER _____	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE _____ 0.2
COMPLETED _____	471022	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2720	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	386	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3240	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.011
		SPECIFIC GRAVITY _____ 0.714

SAMPLE	20299	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.6
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.3
WELL NAME _____	MASONIC HOME 9	N-BUTANE _____ 1.0
API _____	1509300489	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 6, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE _____ 0.2
COMPLETED _____	620619	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2688	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	353	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	13700	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.011
		SPECIFIC GRAVITY _____ 0.715

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20295	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.7</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>LEE 6-L</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320927</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 27 T25S R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>880329</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>14.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2676</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>153</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>701</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.017</u>
		SPECIFIC GRAVITY _____ <u>0.715</u>

SAMPLE	20331	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.6</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>JOHNSON 3</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1509300319</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 18 T25S R36W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OSBORN HEIRS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>481103</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>14.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2500</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>40</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.029</u>
		SPECIFIC GRAVITY _____ <u>0.719</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20272	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.0
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	HUGOTON	PROPANE _____ 3.5
WELL NAME _____	CB & L NO. 8	N-BUTANE _____ 1.0
API _____	1509300483	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 22, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	480116	CYCLOPENTANE _____ —
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2699	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	413	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	208	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.011
		SPECIFIC GRAVITY _____ 0.718

SAMPLE	20275	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.1
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	HUGOTON	PROPANE _____ 3.5
WELL NAME _____	CB & L NO. 9	N-BUTANE _____ 1.0
API _____	1509300473	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 10, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	480116	CYCLOPENTANE _____ —
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2750	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	419	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	79	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.007
		SPECIFIC GRAVITY _____ 0.717

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20274	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.1
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.4
WELL NAME _____	CB & LB 11-2	N-BUTANE _____ 1.0
API _____	1509321610	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 15, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	980209	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2676	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	109	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	154	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.012
		SPECIFIC GRAVITY _____ 0.718

SAMPLE	20284	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.9
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.5
WELL NAME _____	WHITE 1	N-BUTANE _____ 1.1
API _____	1509300472	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 9, T26S, R35W	N-PENTANE _____ 0.3
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	450703	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ TRACE
TRUE VERTICAL DEPTH (FT) _____	2704	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	183	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.019
		SPECIFIC GRAVITY _____ 0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20276	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.2</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>CB & L NO. 10</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509300474</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 11, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>480116</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>15.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2742</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>412</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>119</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.006</u>
		SPECIFIC GRAVITY _____ <u>0.716</u>

SAMPLE	20278	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.2</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>CB & L 1-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509321557</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 14, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>970302</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>15.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2676</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>120</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>297</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>1.008</u>
		SPECIFIC GRAVITY _____ <u>0.716</u>

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20277	COMPONENT, MOLE PCT	
STATE _____	KANSAS	METHANE _____	72.2
COUNTY _____	KEARNY	ETHANE _____	6.4
FIELD _____	HUGOTON	PROPANE _____	3.3
WELL NAME _____	CB & L NO. 11	N-BUTANE _____	1.0
API _____	150930047B	ISOBUTANE _____	0.4
LOCATION _____	SEC. 15, T26S, R35W	N-PENTANE _____	0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____	0.2
COMPLETED _____	450221	CYCLOPENTANE _____	--
SAMPLED _____	000612	HEXANES PLUS _____	0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____	15.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____	0.1
TRUE VERT CAL. DEPTH (FT) _____	2720	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____	421	HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____	256	CARBON DIOXIDE _____	TRACE
		HELIUM _____	0.42
		HEATING VALUE* _____	1,004
		SPECIFIC GRAVITY _____	0.716

SAMPLE	20281	COMPONENT, MOLE PCT	
STATE _____	KANSAS	METHANE _____	71.8
COUNTY _____	KEARNY	ETHANE _____	6.4
FIELD _____	HUGOTON	PROPANE _____	3.5
WELL NAME _____	WHITE 2	N-BUTANE _____	1.0
API _____	1509300475	ISOBUTANE _____	0.4
LOCATION _____	SEC. 12, T26S, R35W	N-PENTANE _____	0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____	0.2
COMPLETED _____	480116	CYCLOPENTANE _____	--
SAMPLED _____	000612	HEXANES PLUS _____	0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____	15.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____	TRACE
TRUE VERTICAL DEPTH (FT) _____	2714	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____	406	HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____	223	CARBON DIOXIDE _____	TRACE
		HELIUM _____	0.42
		HEATING VALUE* _____	1,009
		SPECIFIC GRAVITY _____	0.719

* CALCULATED GROSS BTU PER CU FT DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20333	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	71.0
COUNTY	KEARNY	ETHANE	6.4
FIELD	PANOMA	PROPANE	3.4
WELL NAME	MASONIC HOME 2-2	N-BUTANE	1.0
API	1509320640	ISOBUTANE	0.4
LOCATION	SEC. 6, T26S, R35W	N-PENTANE	0.2
OWNER	SAMEDAN OIL CORP.	ISOPENTANE	0.2
COMPLETED	791103	CYCLOPENTANE	--
SAMPLED	000620	HEXANES PLUS	0.2
FORMATION	PERM-COUNCIL GROVE	NITROGEN	16.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.3
TRUE VERTICAL DEPTH (FT)	2852	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	TRACE
		HELIUM	0.39
		HEATING VALUE*	995
		SPECIFIC GRAVITY	0.722

SAMPLE	20286	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	73.1
COUNTY	KEARNY	ETHANE	6.7
FIELD	PANOMA	PROPANE	3.8
WELL NAME	HILLYARD A-4	N-BUTANE	1.0
API	1509320202	ISOBUTANE	0.4
LOCATION	SEC. 20, T26S, R36W	N-PENTANE	0.2
OWNER	CIMAREX ENERGY CO.	ISOPENTANE	0.2
COMPLETED	751014	CYCLOPENTANE	--
SAMPLED	000612	HEXANES PLUS	0.2
FORMATION	PERM-COUNCIL GROVE	NITROGEN	13.9
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.1
TRUE VERTICAL DEPTH (FT)	2812	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	139	CARBON DIOXIDE	TRACE
		HELIUM	0.39
		HEATING VALUE*	1,035
		SPECIFIC GRAVITY	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20297	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	72.8
COUNTY	KEARNY	ETHANE	6.5
FIELD	PANOMA	PROPANE	3.3
WELL NAME	MASONIC HOME 4-2	N-BUTANE	1.0
API	1509320304	ISOBUTANE	0.4
LOCATION	SEC. 35, T25S, R36W	N-PENTANE	0.2
OWNER	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE	0.2
COMPLETED	760714	CYCLOPENTANE	--
SAMPLED	000620	HEXANES PLUS	0.2
FORMATION	PERM-COUNCIL GROVE	NITROGEN	14.9
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2796	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	199	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1200	CARBON DIOXIDE	TRACE
		HELIUM	0.40
		HEATING VALUE*	1.013
		SPECIFIC GRAVITY	0.714

SAMPLE	20309	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	72.8
COUNTY	KEARNY	ETHANE	6.5
FIELD	PANOMA	PROPANE	3.5
WELL NAME	TATE 8-2	N-BUTANE	1.0
API	1509320216	ISOBUTANE	0.4
LOCATION	SEC. 23, T26S, R36W	N-PENTANE	0.2
OWNER	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE	0.2
COMPLETED	751229	CYCLOPENTANE	--
SAMPLED	000620	HEXANES PLUS	0.2
FORMATION	PERM-COUNCIL GROVE	NITROGEN	14.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2855	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	216	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2600	CARBON DIOXIDE	TRACE
		HELIUM	0.40
		HEATING VALUE*	1.022
		SPECIFIC GRAVITY	0.715

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20330	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.7
COUNTY _____	KEARNY	ETHANE _____ 6.7
FIELD _____	PANOMA	PROPANE _____ 3.8
WELL NAME _____	JOHNSON 4A	N-BUTANE _____ 1.0
API _____	1509320092	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 19, T25S, R36W	N-PENTANE _____ 0.3
OWNER _____	OSBORN HEIRS CO.	ISOPENTANE _____ 0.2
COMPLETED _____	731128	CYCLOPENTANE _____ --
SAMPLED _____	000619	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 14.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2770	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	36	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.035
		SPECIFIC GRAVITY _____ 0.719

SAMPLE	20304	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.3
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	PANOMA	PROPANE _____ 3.4
WELL NAME _____	TATE 3-2	N-BUTANE _____ 1.1
API _____	1509320218	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 13, T26S, R36W	N-PENTANE _____ 0.3
OWNER _____	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE _____ 0.2
COMPLETED _____	751229	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2803	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	223	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2000	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.024
		SPECIFIC GRAVITY _____ 0.721

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20296	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.7</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>RODERICK 3-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320305</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 26, T25S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION BMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>760721</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>15.0</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2798</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>207</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1057</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.012</u>
		SPECIFIC GRAVITY _____ <u>0.713</u>
<hr/>		
SAMPLE	20285	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.3</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>WHITE A-2</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>1509320457</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 9, T26S, R35W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>780111</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>15.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>TRACE</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2962</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>126</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.045</u>
		SPECIFIC GRAVITY _____ <u>0.734</u>

* CALCULATED GROSS BTU PER CU FT DRY, AT 50 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20334	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.5
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	PANOMA	PROPANE _____ 3.5
WELL NAME _____	TATE 4-2	N-BUTANE _____ 1.0
API _____	1809320697	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 11, T26S, R36W	N-PENTANE _____ 0.2
OWNER _____	SAMEDAN OIL CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	800818	CYCLOPENTANE _____
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 14.9
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2806	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.020
		SPECIFIC GRAVITY _____ 0.717

SAMPLE	20332	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.3
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	PANOMA	PROPANE _____ 3.5
WELL NAME _____	MASONIC HOME 9-2	N-BUTANE _____ 1.0
API _____	1509320639	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 6, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	SAMEDAN OIL CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	800805	CYCLOPENTANE _____
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2830	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2050	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.012
		SPECIFIC GRAVITY _____ 0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20279	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.9
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	PANOMA	PROPANE _____ 3.5
WELL NAME _____	CB & L B-3	N-BUTANE _____ 1.0
API _____	1509320415	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 14, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	770816	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2886	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	161	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.013
		SPECIFIC GRAVITY _____ 0.72

SAMPLE	20273	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.9
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	PANOMA	PROPANE _____ 3.5
WELL NAME _____	CB & L B C-1	N-BUTANE _____ 1.1
API _____	1509320518	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 15, T26S, R35W	N-PENTANE _____ 0.3
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	780710	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2930	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	143	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.016
		SPECIFIC GRAVITY _____ 0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES DP MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20270	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.0
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	PANOMA	PROPANE _____ 3.4
WELL NAME _____	C.B. & L. B-6	N-BUTANE _____ 1.0
API _____	1509320434	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 24 T26S R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	771122	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2792	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	206	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.42
		HEATING VALUE* _____ 1.007
		SPECIFIC GRAVITY _____ 0.718

SAMPLE	20283	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.8
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	PANOMA	PROPANE _____ 3.4
WELL NAME _____	WHITE A-1	N-BUTANE _____ 1.0
API _____	1509320447	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 12 T26S R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	771122	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2888	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	113	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.42
		HEATING VALUE* _____ 1.007
		SPECIFIC GRAVITY _____ 0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20271	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.1
COUNTY _____	KEARNY	ETHANE _____ 6.3
FIELD _____	PANOMA	PROPANE _____ 3.4
WELL NAME _____	CITIZEN BLDG. B-7	N-BUTANE _____ 1.0
API _____	1509320435	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 35, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	771107	CYCLOPENTANE _____ ---
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.9
GEOLOGIC PROVINCE CODE _____	350	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2049	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	132	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.42
		HEATING VALUE* _____ 1.003
		SPECIFIC GRAVITY _____ 0.717

SAMPLE	20280	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.7
COUNTY _____	KEARNY	ETHANE _____ 6.3
FIELD _____	PANOMA	PROPANE _____ 3.4
WELL NAME _____	WHITE A-3	N-BUTANE _____ 0.9
API _____	1509320553	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 13, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	781130	CYCLOPENTANE _____ ---
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 16.2
GEOLOGIC PROVINCE CODE _____	350	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2673	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	157	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.42
		HEATING VALUE* _____ 998
		SPECIFIC GRAVITY _____ 0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ADSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE 20290		COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 67.9
COUNTY _____	KEARNY	ETHANE _____ 5.8
FIELD _____	PANOMA	PROPANE _____ 3.1
WELL NAME _____	ZIBELL 1	N-BUTANE _____ 0.9
API _____	1509320258	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 10, T22S, R36W	N-PENTANE _____ 0.2
OWNER _____	CONTINENTAL ENERGY CORP.	ISOPENTANE _____ 0.1
COMPLETED _____	781120	CYCLOPENTANE _____ --
SAMPLED _____	000614	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 20.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2978	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.0
		HELIUM _____ 0.54
		HEATING VALUE* _____ 937
		SPECIFIC GRAVITY _____ 0.727

SAMPLE 20144		COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 62.3
COUNTY _____	MORTON	ETHANE _____ 5.5
FIELD _____	INTERSTATE	PROPANE _____ 3.3
WELL NAME _____	INTERSTATE B2-18	N-BUTANE _____ 1.0
API _____	1512920400	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 18, T34S, R43W	N-PENTANE _____ 0.3
OWNER _____	EDGAR W. WHITE	ISOPENTANE _____ 0.2
COMPLETED _____	800604	CYCLOPENTANE _____ --
SAMPLED _____	000502	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 25.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2564	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.62
		HEATING VALUE* _____ 903
		SPECIFIC GRAVITY _____ 0.76

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20045	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>51.6</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>1.7</u>
FIELD _____	<u>INTERSTATE</u>	PROPANE _____ <u>1.2</u>
WELL NAME _____	<u>INTERSTATE NO. D3-9</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>1512930085</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 9, T34S, R43W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>651202</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000200</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PERM-RED CAVE</u>	NITROGEN _____ <u>41.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1358</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.5</u>
WELLHEAD PRESSURE, PSIG _____	<u>170</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>80</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.89</u>
		HEATING VALUE* _____ <u>689</u>
		SPECIFIC GRAVITY _____ <u>0.788</u>

SAMPLE	20145	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>52.7</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>2.4</u>
FIELD _____	<u>INTERSTATE</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>INTERSTATE RED CAVE 1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1512920359</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 18, T34S, R43W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>EDGAR W. WHITE</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>780313</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000501</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PERM-RED CAVE</u>	NITROGEN _____ <u>39.6</u>
GEOLOGIC PROVINCE CODE _____	<u>350</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1292</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.5</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>140</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.96</u>
		HEATING VALUE* _____ <u>705</u>
		SPECIFIC GRAVITY _____ <u>0.779</u>

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 50 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20148	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>65.6</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>4.5</u>
WELL NAME _____	<u>MCCLAIN 2-33</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>1512920620</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 33, T33S, R42W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>NADEL & GUSSMAN, LLC</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>820317</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000502</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PENN-SHAWNEE</u>	NITROGEN _____ <u>18.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>TRACE</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3104</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>473</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.49</u>
		HEATING VALUE* _____ <u>1.050</u>
		SPECIFIC GRAVITY _____ <u>0.777</u>

SAMPLE	20176	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>62.9</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>4.2</u>
WELL NAME _____	<u>CENTRAL LIFE 1-32</u>	N-BUTANE _____ <u>1.6</u>
API _____	<u>1512910350</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 32, T34S, R42W</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>NADEL & GUSSMAN, LLC</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>551214</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000509</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PENN-TOPEKA</u>	NITROGEN _____ <u>22.0</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>TRACE</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3646</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>5000</u>	CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.60</u>
		HEATING VALUE* _____ <u>1.005</u>
		SPECIFIC GRAVITY _____ <u>0.783</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20146	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>63.1</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>5.9</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>INTERSTATE A1</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1512920377</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 19, T34S, R43W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>EDGAR W. WHITE</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>900115</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000501</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PENN-TOPEKA</u>	NITROGEN _____ <u>24.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2720</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>90</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.64</u>
		HEATING VALUE* _____ <u>924</u>
		SPECIFIC GRAVITY _____ <u>0.757</u>

SAMPLE	20041	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>66.0</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>5.7</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>INTERSTATE NO. 1-11</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>1512910513</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 11, T34S, R43W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>550601</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>991202</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-WABAUNSEE</u>	NITROGEN _____ <u>21.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2955</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>426</u>	HYDROGEN SULFIDE** _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>5129</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.48</u>
		HEATING VALUE* _____ <u>980</u>
		SPECIFIC GRAVITY _____ <u>0.757</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20191	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>63.7</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.8</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>4.5</u>
WELL NAME _____	<u>UNION 1-4</u>	N-BUTANE _____ <u>1.7</u>
API _____	<u>1512910371</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 4, T34S, R42W</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>NADEL & GUSSMAN, LLC</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>550515</u>	CYCLOPENTANE _____ <u>..</u>
SAMPLED _____	<u>000509</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PENN-WABAUNSEE</u>	NITROGEN _____ <u>20.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2537</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>34050</u>	CARBON D OXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.53</u>
		HEATING VALUE* _____ <u>1,039</u>
		SPECIFIC GRAVITY _____ <u>0.786</u>

SAMPLE	20758	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>65.1</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.2</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>INTERSTATE NO. 1-11</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>1512910513</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 11, T34S, R43W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>550601</u>	CYCLOPENTANE _____ <u>..</u>
SAMPLED _____	<u>010731</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-WABAUNSEE</u>	NITROGEN _____ <u>21.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2955</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>426</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>5129</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.55</u>
		HEATING VALUE* _____ <u>969</u>
		SPECIFIC GRAVITY _____ <u>0.757</u>

* CALCULATED GROSS B1 U PER CU. FT., DRY, AT 80 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20040	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>65.1</u>
COUNTY	<u>MORTON</u>	ETHANE	<u>5.3</u>
FIELD	<u>BERRYMAN</u>	PROPANE	<u>3.0</u>
WELL NAME	<u>CMT NO. 1-20</u>	N-BUTANE	<u>1.1</u>
API	<u>1512920006</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC 20, T33S, R41W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>800722</u>	CYCLOPENTANE	<u>-</u>
SAMPLED	<u>991202</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>PENN-WABAUNSEE</u>	NITROGEN	<u>23.8</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>2960</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>231</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>104</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.61</u>
		HEATING VALUE*	<u>906</u>
		SPECIFIC GRAVITY	<u>0.742</u>
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SAMPLE	20761	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>64.5</u>
COUNTY	<u>MORTON</u>	ETHANE	<u>5.5</u>
FIELD	<u>BERRYMAN</u>	PROPANE	<u>2.9</u>
WELL NAME	<u>CMT NO. 1-20</u>	N-BUTANE	<u>0.8</u>
API	<u>1512920006</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC 20, T33S, R41W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>800722</u>	CYCLOPENTANE	<u>-</u>
SAMPLED	<u>010801</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>PENN-WABAUNSEE</u>	NITROGEN	<u>24.7</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>2960</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>231</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>104</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.65</u>
		HEATING VALUE*	<u>882</u>
		SPECIFIC GRAVITY	<u>0.737</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20427	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	68.1
COUNTY	SEWARD	ETHANE	9.1
FIELD	HITCH	PROPANE	8.8
WELL NAME	HITCH 1-36	N-BUTANE	3.3
API	1517520961	ISOBUTANE	1.3
LOCATION	SEC. 36 T32S R34W	N-PENTANE	1.0
OWNER	BEREXCO, INC.	ISOPENTANE	0.6
COMPLETED	870722	CYCLOPENTANE	—
SAMPLED	001107	HEXANES PLUS	1.3
FORMATION	PENN-MORROW	NITROGEN	5.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5706	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	30	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2000	CARBON DIOXIDE	0.5
		HELIUM	0.11
		HEATING VALUE*	1.358
		SPECIFIC GRAVITY	0.852

SAMPLE	20358	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	83.9
COUNTY	STEVENS	ETHANE	5.1
FIELD	WIDE AWAKE	PROPANE	2.8
WELL NAME	BAKER 1-3	N-BUTANE	1.0
API	1518920860	ISOBUTANE	0.4
LOCATION	SEC. 3 T35S R35W	N-PENTANE	0.4
OWNER	QUINQUE OPERATING CO.	ISOPENTANE	0.3
COMPLETED	850829	CYCLOPENTANE	—
SAMPLED	000711	HEXANES PLUS	0.4
FORMATION	PENN-MORROW	NITROGEN	5.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6272	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	50	CARBON DIOXIDE	0.4
		HELIUM	0.20
		HEATING VALUE*	1.101
		SPECIFIC GRAVITY	0.673

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20357	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 83.8
COUNTY _____	STEVENS	ETHANE _____ 5.0
FIELD _____	WIDE AWAKE	PROPANE _____ 2.7
WELL NAME _____	GRIZZEL NO. 1	N-BUTANE _____ 0.9
API _____	1518920928	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 3, T35S, R35W	N-PENTANE _____ 0.3
OWNER _____	AMERICAN WARRIOR, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	861101	CYCLOPENTANE _____ --
SAMPLED _____	000711	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 5.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6522	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2117	CARBON DIOXIDE _____ 0.5
		HELIUM _____ 0.21
		HEATING VALUE* _____ 1.089
		SPECIFIC GRAVITY _____ 0.67
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SAMPLE	20356	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 82.9
COUNTY _____	STEVENS	ETHANE _____ 5.1
FIELD _____	WIDE AWAKE	PROPANE _____ 2.9
WELL NAME _____	BAKER 2-3	N-BUTANE _____ 1.2
API _____	1518920949	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 3, T35S, R35W	N-PENTANE _____ 0.5
OWNER _____	QUINQUE OPERATING CO.	ISOPENTANE _____ 0.3
COMPLETED _____	870402	CYCLOPENTANE _____ --
SAMPLED _____	000711	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 5.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6254	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	20	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.21
		HEATING VALUE* _____ 1.107
		SPECIFIC GRAVITY _____ 0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20408	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 0.1
COUNTY _____	CATRON	ETHANE _____ 0.1
FIELD _____	WILDCAT	PROPANE _____ TRACE
WELL NAME _____	STATE 1-4 NO. 1	N-BUTANE _____ TRACE
API _____	3000320019	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 4, T1N, R21W	N-PENTANE _____ TRACE
OWNER _____	RIDGEWAY ARIZONA OIL CORP.	ISOPENTANE _____ 0.0
COMPLETED _____		CYCLOPENTANE _____ --
SAMPLED _____	000828	HEXANES PLUS _____ 0.0
FORMATION _____	PERM-FORT APACHE	NITROGEN _____ 0.0
GEOLOGIC PROVINCE CODE _____	475	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1783	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	318	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 99.4
		HELIUM _____ 0.20
		HEATING VALUE* _____ 6
		SPECIFIC GRAVITY _____ 1.515

SAMPLE	20566	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 85.0
COUNTY _____	CHAVES	ETHANE _____ 5.1
FIELD _____	PECOS SLOPE	PROPANE _____ 2.0
WELL NAME _____	HELEN COLLINS FEDERAL NO. 3	N-BUTANE _____ 0.8
API _____	3000562072	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 9, T7S, R26E	N-PENTANE _____ 0.3
OWNER _____	PECOS RIVER OPERATING, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	831211	CYCLOPENTANE _____ --
SAMPLED _____	001220	HEXANES PLUS _____ 0.7
FORMATION _____	PERM-ABQ	NITROGEN _____ 4.9
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4156	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	962	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2440	CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.33
		HEATING VALUE* _____ 1,094
		SPECIFIC GRAVITY _____ 0.666

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20567	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.8
COUNTY _____	CHAVES	ETHANE _____ 4.5
FIELD _____	PECOS SLOPE	PROPANE _____ 1.6
WELL NAME _____	HELEN COLLINS FEDERAL NO. 6	N-BUTANE _____ 0.6
API _____	3000562139	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 4 T7S R26E	N-PENTANE _____ 0.2
OWNER _____	PECOS RIVER OPERATING, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	840518	CYCLOPENTANE _____ --
SAMPLED _____	001220	HEXANES PLUS _____ 0.5
FORMATION _____	PERM-ABO	NITROGEN _____ 5.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4271	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	739	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1455	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.34
		HEATING VALUE* _____ 1.062
		SPECIFIC GRAVITY _____ 0.643
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SAMPLE	20586	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 87.7
COUNTY _____	CHAVES	ETHANE _____ 5.4
FIELD _____	PECOS SLOPE S.	PROPANE _____ 1.8
WELL NAME _____	PENJACK FEDERAL NO. 6	N-BUTANE _____ 0.5
API _____	3000562562	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 7 T10S R26E	N-PENTANE _____ 0.1
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	871209	CYCLOPENTANE _____ --
SAMPLED _____	010228	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-ABO	NITROGEN _____ 3.6
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4428	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	970	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1193	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.34
		HEATING VALUE* _____ 1.068
		SPECIFIC GRAVITY _____ 0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20563	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>88.8</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.7</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>SUN FEDERAL NO. 4</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000561596</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 28, T7S, R26E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>PECOS RIVER OPERATING, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>820629</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001220</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>4.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4472</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>1079</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>873</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.35</u>
		HEATING VALUE* _____ <u>1.066</u>
		SPECIFIC GRAVITY _____ <u>0.643</u>

SAMPLE	20548	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.1</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.9</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>1.8</u>
WELL NAME _____	<u>NICHOLS DALE FEDERAL NO. 5</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000561806</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 33, T7S, R26E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>PECOS RIVER OPERATING, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>821112</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001219</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>5.0</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4197</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>909</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1321</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.35</u>
		HEATING VALUE* _____ <u>1.069</u>
		SPECIFIC GRAVITY _____ <u>0.649</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20560	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.9
COUNTY _____	CHAVES	ETHANE _____ 4.7
FIELD _____	PECOS SLOPE	PROPANE _____ 1.7
WELL NAME _____	VANCE FED. A NO. 1	N-BUTANE _____ 0.6
API _____	3000561509	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 34, T7S, R26E	N-PENTANE _____ 0.2
OWNER _____	EXCO RESOURCES, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	820624	CYCLOPENTANE _____ --
SAMPLED _____	001220	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-ABO	NITROGEN _____ 4.7
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4508	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	891	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2527	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.36
		HEATING VALUE* _____ 1.064
		SPECIFIC GRAVITY _____ 0.641
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SAMPLE	20547	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.1
COUNTY _____	CHAVES	ETHANE _____ 4.8
FIELD _____	PECOS SLOPE	PROPANE _____ 1.7
WELL NAME _____	NICHOLS DALE FEDERAL NO. 6	N-BUTANE _____ 0.6
API _____	3000561854	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 33, T7S, R26E	N-PENTANE _____ 0.2
OWNER _____	PECOS RIVER OPERATING, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	821229	CYCLOPENTANE _____ --
SAMPLED _____	001219	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-ABO	NITROGEN _____ 5.4
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4319	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	832	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	547	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.37
		HEATING VALUE* _____ 1.060
		SPECIFIC GRAVITY _____ 0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20602	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.1
COUNTY _____	CHAVES	ETHANE _____ 5.9
FIELD _____	PECOS SLOPE S	PROPANE _____ 2.1
WELL NAME _____	PENJACK FEDERAL NO. 2	N-BUTANE _____ 0.5
API _____	3000562465	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 12, T10S, R25E	N-PENTANE _____ 0.1
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	870428	CYCLOPENTANE _____ --
SAMPLED _____	010228	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-ABO	NITROGEN _____ 4.3
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4421	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	980	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1600	CARBON DIOXIDE _____ 0.0
		HELIUM _____ 0.38
		HEATING VALUE* _____ 1.070
		SPECIFIC GRAVITY _____ 0.64

SAMPLE	20562	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.4
COUNTY _____	CHAVES	ETHANE _____ 4.8
FIELD _____	PECOS SLOPE	PROPANE _____ 1.7
WELL NAME _____	VANCE FED. A NO. 2	N-BUTANE _____ 0.6
API _____	3000561762	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 34, T7S, R26E	N-PENTANE _____ 0.2
OWNER _____	EXCO RESOURCES, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	821028	CYCLOPENTANE _____ --
SAMPLED _____	001220	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-ABO	NITROGEN _____ 5.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4398	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	983	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	6024	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.38
		HEATING VALUE* _____ 1.064
		SPECIFIC GRAVITY _____ 0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20552	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 86.6
COUNTY	CHAVES	ETHANE 4.7
FIELD	PECOS SLOPE	PROPANE 1.7
WELL NAME	VANCE FED. NO. 3	N-BUTANE 0.6
API	3000561508	ISOBUTANE 0.3
LOCATION	SEC. 26, T7S, R26E	N-PENTANE 0.2
OWNER	EXCO RESOURCES, INC.	ISOPENTANE 0.2
COMPLETED	820709	CYCLOPENTANE --
SAMPLED	001220	HEXANES PLUS 0.4
FORMATION	PERMABO	NITROGEN 5.0
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4556	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	865	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	1753	CARBON DIOXIDE TRACE
		HELIUM 0.39
		HEATING VALUE* 1.064
		SPECIFIC GRAVITY 0.643
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SAMPLE	20573	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 83.7
COUNTY	CHAVES	ETHANE 5.0
FIELD	PECOS SLOPE	PROPANE 2.0
WELL NAME	O'CONNELL FEDERAL COM NO. 1	N-BUTANE 0.7
API	3000562740	ISOBUTANE 0.3
LOCATION	SEC. 15, T6S, R26E	N-PENTANE 0.3
OWNER	PECOS RIVER OPERATING, INC.	ISOPENTANE 0.2
COMPLETED	891228	CYCLOPENTANE --
SAMPLED	001221	HEXANES PLUS 0.3
FORMATION	PERMABO	NITROGEN 6.9
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4150	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	800	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	1772	CARBON DIOXIDE TRACE
		HELIUM 0.46
		HEATING VALUE* 1.055
		SPECIFIC GRAVITY 0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20608	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	87.0
COUNTY	CHAVES	ETHANE	4.8
FIELD	PECOS SLOPE S	PROPANE	1.7
WELL NAME	PENJACK FEDERAL NO. 1	N-BUTANE	0.5
API	3000560531	ISOBUTANE	0.3
LOCATION	SEC. 6, T10S, R26E	N-PENTANE	0.1
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.1
COMPLETED	790208	CYCLOPENTANE	--
SAMPLED	010228	HEXANES PLUS	0.1
FORMATION	PERM-ABQ	NITROGEN	4.8
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4334	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	961	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1272	CARBON DIOXIDE	0.0
		HELIUM	0.47
		HEATING VALUE*	1.050
		SPECIFIC GRAVITY	0.833
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SAMPLE	20603	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	86.2
COUNTY	CHAVES	ETHANE	4.9
FIELD	PECOS SLOPE S	PROPANE	1.8
WELL NAME	JJ FEDERAL COM. 2	N-BUTANE	0.6
API	3000562678	ISOBUTANE	0.3
LOCATION	SEC. 1, T10S, R25E	N-PENTANE	0.2
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.1
COMPLETED	890509	CYCLOPENTANE	--
SAMPLED	010228	HEXANES PLUS	0.2
FORMATION	PERM-ABQ	NITROGEN	5.3
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4307	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	972	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	400	CARBON DIOXIDE	0.0
		HELIUM	0.49
		HEATING VALUE*	1.053
		SPECIFIC GRAVITY	0.64

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULT MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20536	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	82.6
COUNTY	CHAVES	ETHANE	4.3
FIELD	PECOS SLOPE	PROPANE	1.6
WELL NAME	COBIE EBEID FEDERAL COM NO. 1	N-BUTANE	0.6
API	3000561350	ISOBUTANE	0.3
LOCATION	SEC. 13 T8S R25E	N-PENTANE	0.2
OWNER	PECOS RIVER OPERATING INC.	ISOPENTANE	0.1
COMPLETED	820227	CYCLOPENTANE	-
SAMPLED	001219	HEXANES PLUS	0.3
FORMATION	PERM-ABQ	NITROGEN	9.3
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4164	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	955	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1304	CARBON DIOXIDE	TRACE
		HELIUM	0.60
		HEATING VALUE*	1.007
		SPECIFIC GRAVITY	0.654
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SAMPLE	20534	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	81.8
COUNTY	CHAVES	ETHANE	4.5
FIELD	PECOS SLOPE	PROPANE	1.8
WELL NAME	PECOS SLOPE 24 FEDERAL NO. 1	N-BUTANE	0.6
API	3000563043	ISOBUTANE	0.3
LOCATION	SEC. 24 T8S R25E	N-PENTANE	0.2
OWNER	MEWBOURNE OIL CO.	ISOPENTANE	0.2
COMPLETED	950408	CYCLOPENTANE	-
SAMPLED	001218	HEXANES PLUS	0.2
FORMATION	PERM-ABQ	NITROGEN	9.7
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4270	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	195	CARBON DIOXIDE	TRACE
		HELIUM	0.61
		HEATING VALUE*	1.008
		SPECIFIC GRAVITY	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20538	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 81.4
COUNTY	CHAVES	ETHANE 4.3
FIELD	PECOS SLOPE	PROPANE 1.7
WELL NAME	COBIE-EBEID FEDERAL COM. NO. 2	N-BUTANE 0.8
API	3000561873	ISOBUTANE 0.3
LOCATION	SEC. 13, T8S, R25E	N-PENTANE 0.2
OWNER	PECOS RIVER OPERATING, INC.	ISOPENTANE 0.2
COMPLETED	830216	CYCLOPENTANE --
SAMPLED	001219	HEXANES PLUS 0.2
FORMATION	PERM-ABQ	NITROGEN 10.1
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3892	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	771	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	881	CARBON DIOXIDE TRACE
		HELIUM 0.62
		HEATING VALUE* 1.009
		SPECIFIC GRAVITY 0.663

SAMPLE	20604	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 86.7
COUNTY	CHAVES	ETHANE 4.0
FIELD	PECOS SLOPE S	PROPANE 1.1
WELL NAME	MM FEDERAL NO. 7	N-BUTANE 0.3
API	3000562493	ISOBUTANE 0.1
LOCATION	SEC. 25, T9S, R25E	N-PENTANE 0.1
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE 0.1
COMPLETED	870730	CYCLOPENTANE --
SAMPLED	010228	HEXANES PLUS 0.2
FORMATION	PERM-ABQ	NITROGEN 6.7
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4298	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	934	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	598	CARBON DIOXIDE TRACE
		HELIUM 0.64
		HEATING VALUE* 1.005
		SPECIFIC GRAVITY 0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20605	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	84.1
COUNTY	CHAVES	ETHANE	4.5
FIELD	PECOS SLOPE S.	PROPANE	1.6
WELL NAME	RICK FEDERAL COM. 1	N-BUTANE	0.6
API	3000562215	ISOBUTANE	0.3
LOCATION	SEC. 26, T9S, R25E	N-PENTANE	0.2
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.1
COMPLETED	841220	CYCLOPENTANE	..
SAMPLED	010228	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	7.7
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4104	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1870	CARBON DIOXIDE	TRACE
		HELIUM	0.66
		HEATING VALUE*	1.022
		SPECIFIC GRAVITY	0.646

SAMPLE	20514	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	82.7
COUNTY	CHAVES	ETHANE	4.4
FIELD	PECOS SLOPE	PROPANE	1.7
WELL NAME	COYOTE FEDERAL NO. 3	N-BUTANE	0.6
API	3000561099	ISOBUTANE	0.3
LOCATION	SEC. 7, T8S, R25E	N-PENTANE	0.3
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.1
COMPLETED	820226	CYCLOPENTANE	..
SAMPLED	001207	HEXANES PLUS	0.6
FORMATION	PERM-ABO	NITROGEN	8.6
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3589	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	875	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1546	CARBON DIOXIDE	TRACE
		HELIUM	0.77
		HEATING VALUE*	1.029
		SPECIFIC GRAVITY	0.66

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20513	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	83.1
COUNTY	CHAVES	ETHANE	4.6
FIELD	PECOS S. OPE	PROPANE	1.7
WELL NAME	COYOTE FEDERAL NO. 4-Y	N-BUTANE	0.6
API	3000561880	ISOBUTANE	0.3
LOCATION	SEC. 7, T8S, R25E	N-PENTANE	0.3
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.2
COMPLETED	830208	CYCLOPENTANE	--
SAMPLED	001207	HEXANES PLUS	0.4
FORMATION	PERM-ABO	NITROGEN	7.9
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3711	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	826	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1129	CARBON DIOXIDE	TRACE
		HELIUM	0.77
		HEATING VALUE*	1,033
		SPECIFIC GRAVITY	0.657
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SAMPLE	20606	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	83.5
COUNTY	CHAVES	ETHANE	4.3
FIELD	CHAVES CO. UNDESIGNATED	PROPANE	1.6
WELL NAME	PECOS RIVER FEDERAL NO. 1	N-BUTANE	0.5
API	3000561237	ISOBUTANE	0.3
LOCATION	SEC. 23, T9S, R25E	N-PENTANE	0.2
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.1
COMPLETED	820119	CYCLOPENTANE	--
SAMPLED	010228	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	8.3
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4036	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	971	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1139	CARBON DIOXIDE	TRACE
		HELIUM	0.79
		HEATING VALUE*	1,009
		SPECIFIC GRAVITY	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 29 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20516	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	82.9
COUNTY	CHAVES	ETHANE	4.5
FIELD	PECOS SLOPE	PROPANE	1.7
WELL NAME	COYOTE FEDERAL NO. 1	N-BUTANE	0.7
API	3000560978	ISOBUTANE	0.3
LOCATION	SEC. 1, T8S, R24E	N-PENTANE	0.3
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.2
COMPLETED	810721	CYCLOPENTANE	—
SAMPLED	001207	HEXANES PLUS	0.5
FORMATION	PERM-ABO	NITROGEN	8.0
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3760	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	7797	CARBON DIOXIDE	TRACE
		HELIUM	0.80
		HEATING VALUE*	1.036
		SPECIFIC GRAVITY	0.66

SAMPLE	20515	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	81.6
COUNTY	CHAVES	ETHANE	4.4
FIELD	PECOS SLOPE	PROPANE	1.7
WELL NAME	COYOTE FED. NO. 2	N-BUTANE	0.6
API	3000561100	ISOBUTANE	0.3
LOCATION	SEC. 12, T8S, R24E	N-PENTANE	0.3
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.2
COMPLETED	811214	CYCLOPENTANE	—
SAMPLED	001207	HEXANES PLUS	0.5
FORMATION	PERM-ABO	NITROGEN	9.5
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3691	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	887	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	220	CARBON DIOXIDE	TRACE
		HELIUM	0.84
		HEATING VALUE*	1.017
		SPECIFIC GRAVITY	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20529	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 82.5
COUNTY _____	CHAVES	ETHANE _____ 4.2
FIELD _____	PECOS SLOPE	PROPANE _____ 1.4
WELL NAME _____	DANA FED. NO. 4	N-BUTANE _____ 0.5
API _____	3000561810	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 3, T9S, R25E	N-PENTANE _____ 0.4
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	821111	CYCLOPENTANE _____ --
SAMPLED _____	001222	HEXANES PLUS _____ 1.8
FORMATION _____	PERM-ABO	NITROGEN _____ 7.7
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4007	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1020	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2055	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.97
		HEATING VALUE* _____ 1,079
		SPECIFIC GRAVITY _____ 0.684

SAMPLE	20528	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 84.2
COUNTY _____	CHAVES	ETHANE _____ 4.7
FIELD _____	PECOS SLOPE	PROPANE _____ 1.8
WELL NAME _____	DANA FED. NO. 3	N-BUTANE _____ 0.7
API _____	3000561435	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 3, T9S, R25E	N-PENTANE _____ 0.3
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	820423	CYCLOPENTANE _____ --
SAMPLED _____	001218	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-ABO	NITROGEN _____ 6.4
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4011	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	1022	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1474	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.97
		HEATING VALUE* _____ 1,046
		SPECIFIC GRAVITY _____ 0.65

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREE-Fahrenheit AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20500	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	81.0
COUNTY	CHAVES	ETHANE	9.1
FIELD	BUFFALO VALLEY	PROPANE	4.8
WELL NAME	TANNER FEDERAL NO. 1	N-BUTANE	1.6
API	3000562701	ISOBUTANE	0.7
LOCATION	SEC. 35, T14S, R27E	N-PENTANE	0.5
OWNER	SNOW OIL & GAS, INC.	ISOPENTANE	0.5
COMPLETED	890824	CYCLOPENTANE	-
SAMPLED	001206	HEXANES PLUS	0.9
FORMATION	PENN-ATOKA	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8387	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1839	CARBON DIOXIDE	0.4
		HELIUM	0.02
		HEATING VALUE*	1.263
		SPECIFIC GRAVITY	0.73

SAMPLE	20502	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	87.4
COUNTY	CHAVES	ETHANE	7.3
FIELD	BUFFALO VALLEY	PROPANE	2.5
WELL NAME	ROSE FEDERAL NO. 4	N-BUTANE	0.6
API	3000561597	ISOBUTANE	0.3
LOCATION	SEC. 13, T16S, 27E	N-PENTANE	0.2
OWNER	READ & STEVENS, INC.	ISOPENTANE	0.2
COMPLETED	821206	CYCLOPENTANE	-
SAMPLED	001206	HEXANES PLUS	0.6
FORMATION	PENN-ATOKA	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8789	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1751	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	240	CARBON DIOXIDE	0.4
		HELIUM	0.03
		HEATING VALUE*	1.150
		SPECIFIC GRAVITY	0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20503	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	87.0
COUNTY	CHAVES	ETHANE	7.5
FIELD	BUFFALO VALLEY	PROPANE	2.8
WELL NAME	HARRIS FEDERAL COM NO. 2	N-BUTANE	0.7
API	3000560277	ISOBUTANE	0.4
LOCATION	SEC. 24, T15S, R27E	N-PENTANE	0.2
OWNER	READ & STEVENS, INC.	ISOPENTANE	0.2
COMPLETED	740401	CYCLOPENTANE	-
SAMPLED	001206	HEXANES PLUS	0.3
FORMATION	PENN-ATOKA	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8807	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	700	CARBON DIOXIDE	0.3
		HELIUM	0.03
		HEATING VALUE*	1.150
		SPECIFIC GRAVITY	0.656

SAMPLE	20504	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	83.7
COUNTY	CHAVES	ETHANE	8.7
FIELD	DIAMOND MOUND	PROPANE	3.7
WELL NAME	MESA STATE COM NO. 3	N-BUTANE	1.1
API	3000562255	ISOBUTANE	0.5
LOCATION	SEC. 31, T15S, R28E	N-PENTANE	0.3
OWNER	OCEAN ENERGY, INC.	ISOPENTANE	0.3
COMPLETED	851009	CYCLOPENTANE	-
SAMPLED	001206	HEXANES PLUS	0.6
FORMATION	PENN-MORROW	NITROGEN	0.8
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9050	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	2320	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	14569	CARBON DIOXIDE	0.4
		HELIUM	0.03
		HEATING VALUE*	1.198
		SPECIFIC GRAVITY	0.691

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20493	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>28.1</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>10.9</u>
FIELD _____	<u>ROUND TANK</u>	PROPANE _____ <u>8.0</u>
WELL NAME _____	<u>J.W. STATE NO. 2</u>	N-BUTANE _____ <u>2.5</u>
API _____	<u>3000560105</u>	ISOBUTANE _____ <u>1.2</u>
LOCATION _____	<u>SEC 30 T15S R29E</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>ELK OIL CO.</u>	ISOPENTANE _____ <u>0.6</u>
COMPLETED _____	<u>700210</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>001208</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PERM-QUEEN</u>	NITROGEN _____ <u>49.4</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1482</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.07</u>
		HEATING VALUE* _____ <u>856</u>
		SPECIFIC GRAVITY _____ <u>0.986</u>
SAMPLE	20570	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.7</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>5.0</u>
FIELD _____	<u>HAYSTACK</u>	PROPANE _____ <u>2.2</u>
WELL NAME _____	<u>WEST HAYSTACK FEDERAL NO. 1</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3000560290</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 19 T6S R27E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>READ & STEVENS, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>811117</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>001220</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PENN-VIRGIL</u>	NITROGEN _____ <u>4.4</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5704</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>1792</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>611</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.36</u>
		HEATING VALUE* _____ <u>1.067</u>
		SPECIFIC GRAVITY _____ <u>0.64</u>

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20571	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	85.9
COUNTY	CHAVES	ETHANE	5.3
FIELD	HAYSTACK	PROPANE	2.2
WELL NAME	FEDERAL NO. 1	N-BUTANE	0.8
API	3000560135	ISOBUTANE	0.4
LOCATION	SEC. 21, T6S, R27E	N-PENTANE	0.2
OWNER	READ & STEVENS, INC.	ISOPENTANE	0.2
COMPLETED	700921	CYCLOPENTANE	--
SAMPLED	001220	HEXANES PLUS	0.2
FORMATION	PENN-VIRGIL	NITROGEN	4.3
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5977	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	5714	CARBON DIOXIDE	0.1
		HELIUM	0.35
		HEATING VALUE*	1.084
		SPECIFIC GRAVITY	0.652
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SAMPLE	20697	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	82.4
COUNTY	EDDY	ETHANE	9.0
FIELD	NOT GIVEN	PROPANE	3.8
WELL NAME	LITTLEFIELD EM FEDERAL NO. 1	N-BUTANE	1.1
API	3001521996	ISOBUTANE	0.5
LOCATION	SEC. 20, T18S, R31E	N-PENTANE	0.3
OWNER	OCEAN ENERGY, INC.	ISOPENTANE	0.3
COMPLETED	770328	CYCLOPENTANE	--
SAMPLED	010619	HEXANES PLUS	0.6
FORMATION	PENN-ATOKA MORROW	NITROGEN	1.8
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11102	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	3103	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	8173	CARBON DIOXIDE	0.1
		HELIUM	0.04
		HEATING VALUE*	1.186
		SPECIFIC GRAVITY	0.693

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20695	COMPONENT, MOLE PCT	
STATE _____	<u>NEW MEXICO</u>	METHANE _____	<u>59.8</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____	<u>14.4</u>
FIELD _____	<u>POWER</u>	PROPANE _____	<u>10.1</u>
WELL NAME _____	<u>SHINNERY FEDERAL NO. 1</u>	N-BUTANE _____	<u>3.2</u>
API _____	<u>3001529976</u>	ISOBUTANE _____	<u>1.3</u>
LOCATION _____	<u>SEC. 5, T18S, R31E</u>	N-PENTANE _____	<u>0.9</u>
OWNER _____	<u>ROBERT H. FORREST, JR. OIL LLC</u>	ISOPENTANE _____	<u>1.0</u>
COMPLETED _____	<u>980201</u>	CYCLOPENTANE _____	<u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____	<u>1.1</u>
FORMATION _____	<u>PERM-GRAYBURG</u>	NITROGEN _____	<u>7.9</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____	<u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3442</u>	ARGON _____	<u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	<u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____	<u>0.2</u>
		HELIUM _____	<u>0.14</u>
		HEATING VALUE* _____	<u>1.388</u>
		SPECIFIC GRAVITY _____	<u>0.583</u>

SAMPLE	20694	COMPONENT, MOLE PCT	
STATE _____	<u>NEW MEXICO</u>	METHANE _____	<u>38.8</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____	<u>17.4</u>
FIELD _____	<u>GRAYBURG JACKSON</u>	PROPANE _____	<u>15.6</u>
WELL NAME _____	<u>SKELLY UNIT NO. 274</u>	N-BUTANE _____	<u>5.0</u>
API _____	<u>3001529210</u>	ISOBUTANE _____	<u>2.2</u>
LOCATION _____	<u>SEC. 28, T17S, R31E</u>	N-PENTANE _____	<u>2.2</u>
OWNER _____	<u>WISER OIL CO.</u>	ISOPENTANE _____	<u>1.9</u>
COMPLETED _____	<u>970110</u>	CYCLOPENTANE _____	<u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____	<u>2.4</u>
FORMATION _____	<u>PERM-GRAYBURG</u>	NITROGEN _____	<u>12.7</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____	<u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3541</u>	ARGON _____	<u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	<u>0.0</u>
OPEN FLOW, MCFD _____	<u>40</u>	CARBON DIOXIDE _____	<u>1.4</u>
		HELIUM _____	<u>0.22</u>
		HEATING VALUE* _____	<u>1.612</u>
		SPECIFIC GRAVITY _____	<u>1.098</u>

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20509	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>83.2</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>7.7</u>
FIELD _____	<u>LOGAN DRAW</u>	PROPANE _____ <u>4.5</u>
WELL NAME _____	<u>OXY HARVESTER FEDERAL NO. 1</u>	N-BUTANE _____ <u>1.9</u>
API _____	<u>3001530882</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC. 26 T17S, R27E</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>OXY USA WTP LIMITED PARTNERSHIP</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>000519</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001206</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>9640</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1738</u>	CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.225</u>
		SPECIFIC GRAVITY _____ <u>0.706</u>

SAMPLE	20508	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.9</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>7.2</u>
FIELD _____	<u>LOGAN DRAW</u>	PROPANE _____ <u>2.9</u>
WELL NAME _____	<u>OXY SKINNY SALOON FEDERAL NO. 1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>3001530756</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 11 T17S, R27E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>OXY USA WTP LIMITED PARTNERSHIP</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>991129</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001206</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.5</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>9394</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>880</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>532</u>	CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.157</u>
		SPECIFIC GRAVITY _____ <u>0.662</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20455	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 91.9
COUNTY _____	EDDY	ETHANE _____ 4.0
FIELD _____	HAPPY VALLEY	PROPANE _____ 0.8
WELL NAME _____	LANCASTER SPRING COM NO. 3	N-BUTANE _____ 0.1
API _____	3001530965	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 8 T22S R26E	N-PENTANE _____ TRACE
OWNER _____	RICKS EXPLORATION ACQUISITION CORP.	ISOPENTANE _____ 0.1
COMPLETED _____	001101	CYCLOPENTANE _____ -
SAMPLED _____	001127	HEXANES PLUS _____ 0.1
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11486	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	91	CARBON DIOXIDE _____ 2.5
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.038
		SPECIFIC GRAVITY _____ 0.616

SAMPLE	20456	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 95.3
COUNTY _____	EDDY	ETHANE _____ 2.5
FIELD _____	EDDY UNDESIGNATED	PROPANE _____ 0.4
WELL NAME _____	FEDERAL AA NO. 1	N-BUTANE _____ 0.1
API _____	3001522928	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 17 T22S R26E	N-PENTANE _____ TRACE
OWNER _____	RICKS EXPLORATION ACQUISITION CORP.	ISOPENTANE _____ TRACE
COMPLETED _____	791009	CYCLOPENTANE _____ -
SAMPLED _____	001127	HEXANES PLUS _____ 0.1
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11290	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1300	CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.031
		SPECIFIC GRAVITY _____ 0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20457	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 94.9
COUNTY _____	EDDY	ETHANE _____ 2.7
FIELD _____	HAPPY VALLEY	PROPANE _____ 0.5
WELL NAME _____	FEDERAL BN NO. 1	N-BUTANE _____ 0.1
API _____	300152349B	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 17, T22S, R26E	N-PENTANE _____ TRACE
OWNER _____	RICKS EXPLORATION ACQUISITION CORP.	ISOPENTANE _____ TRACE
COMPLETED _____	810113	CYCLOPENTANE _____ --
SAMPLED _____	001127	HEXANES PLUS _____ 0.1
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.6
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11668	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1778	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	6500	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.034
		SPECIFIC GRAVITY _____ 0.59
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SAMPLE	20459	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 95.8
COUNTY _____	EDDY	ETHANE _____ 2.1
FIELD _____	HAPPY VALLEY	PROPANE _____ 0.3
WELL NAME _____	LANCASTER SPRING COM NO. 1	N-BUTANE _____ 0.1
API _____	300152343Z	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 8, T22S, R26E	N-PENTANE _____ TRACE
OWNER _____	RICKS EXPLORATION ACQUISITION CORP.	ISOPENTANE _____ TRACE
COMPLETED _____	801028	CYCLOPENTANE _____ --
SAMPLED _____	001127	HEXANES PLUS _____ 0.1
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11330	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	13000	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.026
		SPECIFIC GRAVITY _____ 0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20507	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.8
COUNTY _____	EDDY	ETHANE _____ 7.1
FIELD _____	CROW FLATS	PROPANE _____ 2.9
WELL NAME _____	FED. CX GAS COM NO. 1	N-BUTANE _____ 0.8
API _____	3001524025	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 12, T17S, R27E	N-PENTANE _____ 0.3
OWNER _____	RICKS EXPLORATION ACQUISITION CORP.	ISOPENTANE _____ 0.3
COMPLETED _____	820222	CYCLOPENTANE _____ --
SAMPLED _____	001206	HEXANES PLUS _____ 0.6
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9400	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1410	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.167
		SPECIFIC GRAVITY _____ 0.667
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SAMPLE	20458	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 91.9
COUNTY _____	EDDY	ETHANE _____ 4.1
FIELD _____	HAPPY VALLEY	PROPANE _____ 1.2
WELL NAME _____	STATE IM COM NO. 1	N-BUTANE _____ 0.4
API _____	3001523461	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 16, T22S, R26E	N-PENTANE _____ 0.1
OWNER _____	RICKS EXPLORATION ACQUISITION CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	810622	CYCLOPENTANE _____ --
SAMPLED _____	001127	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-MORROW	NITROGEN _____ 1.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11542	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3598	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1492	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.085
		SPECIFIC GRAVITY _____ 0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE REPRODUCIBLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20460	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	81.3
COUNTY	EDDY	ETHANE	11.2
FIELD	CARLSBAD E	PROPANE	3.7
WELL NAME	E.G. GARNER COM NO. 1	N-BUTANE	1.2
API	3001522722	ISOBUTANE	0.6
LOCATION	SEC. 26, T21S, R27E	N-PENTANE	0.4
OWNER	DELTA PETROLEUM CORP.	ISOPENTANE	0.3
COMPLETED	790220	CYCLOPENTANE	-
SAMPLED	001127	HEXANES PLUS	0.4
FORMATION	PENN-MORROW	NITROGEN	0.8
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11616	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1095	CARBON DIOXIDE	0.1
		HELIUM	0.05
		HEATING VALUE*	1.219
		SPECIFIC GRAVITY	0.701

SAMPLE	20485	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	78.6
COUNTY	LEA	ETHANE	10.3
FIELD	DRINKARD	PROPANE	4.6
WELL NAME	LOCKHART A27 NO. 5	N-BUTANE	1.4
API	3002506803	ISOBUTANE	0.5
LOCATION	SEC. 27, T21S, R37E	N-PENTANE	0.4
OWNER	CONOCO, INC.	ISOPENTANE	0.3
COMPLETED	971027	CYCLOPENTANE	--
SAMPLED	001129	HEXANES PLUS	0.6
FORMATION	PERM-BLINEBRY	NITROGEN	2.5
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6387	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	97	CARBON DIOXIDE	0.6
		HELIUM	0.04
		HEATING VALUE*	1.217
		SPECIFIC GRAVITY	0.726

* CALCULATED GROSS BTU PER CU FT DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20484	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 77.3
COUNTY _____	LEA	ETHANE _____ 10.9
FIELD _____	BLINEBRY	PROPANE _____ 5.3
WELL NAME _____	LOCKHART B35 NO. 1	N-BUTANE _____ 1.8
API _____	3002507029	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 35, T21S, R37E	N-PENTANE _____ 0.6
OWNER _____	CONOCO, INC.	ISOPENTANE _____ 0.4
COMPLETED _____	980323	CYCLOPENTANE _____ --
SAMPLED _____	001129	HEXANES PLUS _____ 0.8
FORMATION _____	PERM-BLINEBRY	NITROGEN _____ 2.1
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6226	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	493	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.269
		SPECIFIC GRAVITY _____ 0.747

SAMPLE	20684	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 70.4
COUNTY _____	LEA	ETHANE _____ 11.5
FIELD _____	YOUNG N.	PROPANE _____ 6.3
WELL NAME _____	R.E. GRAHAM 7 NO. 1	N-BUTANE _____ 2.5
API _____	3002529002	ISOBUTANE _____ 0.9
LOCATION _____	SEC. 7, T18S, R32E	N-PENTANE _____ 0.9
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.9
COMPLETED _____	850415	CYCLOPENTANE _____ --
SAMPLED _____	010618	HEXANES PLUS _____ 1.6
FORMATION _____	PERM-BONE SPRING	NITROGEN _____ 4.7
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8546	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.342
		SPECIFIC GRAVITY _____ 0.817

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20465	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE
COUNTY	LEA	ETHANE
FIELD	AIRSTRIP	PROPANE
WELL NAME	TEAPOT NO. 1 UNIT J	N-BUTANE
API	3002525955	ISOBUTANE
LOCATION	SEC. 34, T18S, R34E	N-PENTANE
OWNER	AMTEX ENERGY INC.	ISOPENTANE
COMPLETED	880421	CYCLOPENTANE
SAMPLED	001127	HEXANES PLUS
FORMATION	PERM-BONE SPRING	NITROGEN
GEOLOGIC PROVINCE CODE	430	OXYGEN
TRUE VERTICAL DEPTH (FT)	9975	ARGON
MEASURED DEPTH		HYDROGEN
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**
OPEN FLOW, MCFD	32	CARBON DIOXIDE
		HELIUM
		HEATING VALUE*
		SPECIFIC GRAVITY
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SAMPLE	20679	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE
COUNTY	LEA	ETHANE
FIELD	YOUNG N	PROPANE
WELL NAME	YOUNG 8709, IV-P, NO. 1	N-BUTANE
API	3002530051	ISOBUTANE
LOCATION	SEC. 11, T18S, R32E	N-PENTANE
OWNER	BTA OIL PRODUCERS	ISOPENTANE
COMPLETED	871119	CYCLOPENTANE
SAMPLED	010618	HEXANES PLUS
FORMATION	PERM-BONE SPRING	NITROGEN
GEOLOGIC PROVINCE CODE	430	OXYGEN
TRUE VERTICAL DEPTH (FT)	8435	ARGON
MEASURED DEPTH		HYDROGEN
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**
OPEN FLOW, MCFD	249	CARBON DIOXIDE
		HELIUM
		HEATING VALUE*
		SPECIFIC GRAVITY

* CALCULATED GROSS BTU PER CU FT, DRY, AT 50 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20700	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	55.7
COUNTY	LEA	ETHANE	9.5
FIELD	LEA NE	PROPANE	30.3
WELL NAME	PEARL 33 FEDERAL NO. 1	N-BUTANE	3.6
API	3002534119	ISOBUTANE	1.8
LOCATION	SEC. 33, T19S, R34E	N-PENTANE	0.9
OWNER	READ & STEVENS, INC.	ISOPENTANE	1.3
COMPLETED	980929	CYCLOPENTANE	—
SAMPLED	010619	HEXANES PLUS	1.3
FORMATION	PERM-DELAWARE	NITROGEN	15.3
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5640	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	124	CARBON DIOXIDE	0.1
		HELIUM	0.16
		HEATING VALUE*	1.320
		SPECIFIC GRAVITY	0.916
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SAMPLE	20486	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	76.7
COUNTY	LEA	ETHANE	10.6
FIELD	DRINKARD	PROPANE	5.5
WELL NAME	CENTRAL DRINKARD UNIT 111	N-BUTANE	2.0
API	3002506845	ISOBUTANE	0.6
LOCATION	SEC. 28, T21S, R37E	N-PENTANE	0.7
OWNER	CHEVRON U.S.A., INC.	ISOPENTANE	0.5
COMPLETED	540423	CYCLOPENTANE	—
SAMPLED	001130	HEXANES PLUS	1.0
FORMATION	PERM-DRINKARD	NITROGEN	2.2
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6379	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2980	CARBON DIOXIDE	0.2
		HELIUM	0.04
		HEATING VALUE*	1.282
		SPECIFIC GRAVITY	0.758

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20488	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 73.5
COUNTY _____	LEA	ETHANE _____ 8.0
FIELD _____	EUMONT	PROPANE _____ 4.8
WELL NAME _____	GILLILLY FEDERAL GAS COM NO. 4	N-BUTANE _____ 1.7
API _____	3002504309	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 24 T20S R36E	N-PENTANE _____ 0.4
OWNER _____	OCCIDENTAL PERMIAN LTD.	ISOPENTANE _____ 0.6
COMPLETED _____	531128	CYCLOPENTANE _____ --
SAMPLED _____	001130	HEXANES PLUS _____ 0.6
FORMATION _____	PERM-GRAYBURG	NITROGEN _____ 3.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3470	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 1.3
OPEN FLOW, MCFD _____	8800	CARBON DIOXIDE _____ 4.6
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.167
		SPECIFIC GRAVITY _____ 0.782

SAMPLE	20693	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 58.2
COUNTY _____	LEA	ETHANE _____ 15.5
FIELD _____	MAL JAMAR	PROPANE _____ 9.8
WELL NAME _____	BROWN FEDERAL NO. 1	N-BUTANE _____ 3.3
API _____	3002530199	ISOBUTANE _____ 1.1
LOCATION _____	SEC. 31 T17S R32E	N-PENTANE _____ 1.4
OWNER _____	MACK ENERGY CORP.	ISOPENTANE _____ 1.2
COMPLETED _____	880225	CYCLOPENTANE _____ --
SAMPLED _____	010819	HEXANES PLUS _____ 1.7
FORMATION _____	PERM-GRAYBURG	NITROGEN _____ 6.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3820	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.5
OPEN FLOW, MCFD _____	55	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.13
		HEATING VALUE* _____ 1.444
		SPECIFIC GRAVITY _____ 0.915

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20471	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 90.4
COUNTY _____	LEA	ETHANE _____ 4.8
FIELD _____	BUFFALO	PROPANE _____ 1.8
WELL NAME _____	NELLIS C FEDERAL GAS COM NO. 1	N-BUTANE _____ 0.6
API _____	3002526799	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 8, T19S, R33E	N-PENTANE _____ 0.2
OWNER _____	PENROCK OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	830711	CYCLOPENTANE _____ =
SAMPLED _____	001128	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13620	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	463	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.106
		SPECIFIC GRAVITY _____ 0.635

SAMPLE	20470	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 87.8
COUNTY _____	LEA	ETHANE _____ 5.7
FIELD _____	BUFFALO	PROPANE _____ 2.5
WELL NAME _____	KUDU 9 FEDERAL COM 1	N-BUTANE _____ 0.8
API _____	3002534707	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 9, T19S, R33E	N-PENTANE _____ 0.2
OWNER _____	NEARBURG PRODUCING CO.	ISOPENTANE _____ 0.2
COMPLETED _____	000612	CYCLOPENTANE _____ =
SAMPLED _____	001128	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13373	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 1.5
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.125
		SPECIFIC GRAVITY _____ 0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20468	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	87.2
COUNTY	LEA	ETHANE	6.2
FIELD	GEMF	PROPANE	2.6
WELL NAME	LAGUNA DEEP FEDERAL UNIT NO. 2	N-BUTANE	0.8
API	3002526440	ISOBUTANE	0.4
LOCATION	SEC. 26, T19S, R33E	N-PENTANE	0.3
OWNER	MATADOR OPERATING CO.	ISOPENTANE	0.3
COMPLETED	830705	CYCLOPENTANE	--
SAMPLED	001128	HEXANES PLUS	0.6
FORMATION	PENN-MORROW	NITROGEN	0.9
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	13390	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	344	CARBON DIOXIDE	0.7
		HELIUM	0.02
		HEATING VALUE*	1.146
		SPECIFIC GRAVITY	0.663

SAMPLE	20012	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	84.6
COUNTY	LEA	ETHANE	7.9
FIELD	TOWNSEND	PROPANE	3.5
WELL NAME	BUFFALO ARJ STATE COM NO. 1	N-BUTANE	1.0
API	3002502801	ISOBUTANE	0.5
LOCATION	SEC. 18, T16S, R35E	N-PENTANE	0.3
OWNER	YATES PETROLEUM CORP.	ISOPENTANE	0.3
COMPLETED	971222	CYCLOPENTANE	--
SAMPLED	980728	HEXANES PLUS	0.3
FORMATION	PENN-MORROW	NITROGEN	0.7
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	12950	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1650	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1630	CARBON DIOXIDE	0.7
		HELIUM	0.06
		HEATING VALUE*	1.180
		SPECIFIC GRAVITY	0.68

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20489	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 75.3
COUNTY _____	LEA	ETHANE _____ 6.6
FIELD _____	EUMONT	PROPANE _____ 4.7
WELL NAME _____	EUMONT 21 FEDERAL NO. 1	N-BUTANE _____ 1.9
API _____	3002533170	ISOBUTANE _____ 0.9
LOCATION _____	SEC. 21, T20S, R37E	N-PENTANE _____ 0.5
OWNER _____	MEWBOURNE OIL CO.	ISOPENTANE _____ 0.6
COMPLETED _____	951203	CYCLOPENTANE _____ --
SAMPLED _____	001130	HEXANES PLUS _____ 0.8
FORMATION _____	PERM-QUEEN	NITROGEN _____ 1.1
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3550	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 1.7
OPEN FLOW, MCFD _____	250	CARBON DIOXIDE _____ 5.9
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.182
		SPECIFIC GRAVITY _____ 0.79

SAMPLE	20491	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 76.6
COUNTY _____	LEA	ETHANE _____ 7.1
FIELD _____	EUMONT	PROPANE _____ 4.4
WELL NAME _____	GILLULY B FEDERAL RA A NO. 7	N-BUTANE _____ 1.5
API _____	3002506236	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 22, T20S, R37E	N-PENTANE _____ 0.3
OWNER _____	OCCIDENTAL PERMIAN LTD	ISOPENTANE _____ 0.4
COMPLETED _____	560329	CYCLOPENTANE _____ --
SAMPLED _____	001130	HEXANES PLUS _____ 0.5
FORMATION _____	PERM-QUEEN	NITROGEN _____ 1.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3658	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 1.1
OPEN FLOW, MCFD _____	2718	CARBON DIOXIDE _____ 6.4
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.144
		SPECIFIC GRAVITY _____ 0.765

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20487	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	77.0
COUNTY	LEA	ETHANE	8.0
FIELD	EUMONT	PROPANE	4.3
WELL NAME	GILLULLY FEDERAL GAS COM NO. 15	N-BUTANE	1.3
API	3002525866	ISOBUTANE	0.6
LOCATION	SEC. 24, T20S, R36E	N-PENTANE	0.3
OWNER	OCCIDENTAL PERMIAN LTD.	ISOPENTANE	0.4
COMPLETED	780531	CYCLOPENTANE	--
SAMPLED	001130	HEXANES PLUS	0.4
FORMATION	PERM-QUEEN	NITROGEN	1.8
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3610	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.3
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.4
OPEN FLOW, MCFD	296	CARBON DIOXIDE	5.2
		HELIUM	0.01
		HEATING VALUE*	1.141
		SPECIFIC GRAVITY	0.748

SAMPLE	20490	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	74.8
COUNTY	LEA	ETHANE	9.6
FIELD	EUMONT	PROPANE	4.5
WELL NAME	GILLULLY B FEDERAL RA A NO. 4	N-BUTANE	1.2
API	3002506234	ISOBUTANE	0.6
LOCATION	SEC. 22, T20S, R37E	N-PENTANE	0.3
OWNER	OCCIDENTAL PERMIAN LTD.	ISOPENTANE	0.3
COMPLETED	540317	CYCLOPENTANE	--
SAMPLED	001130	HEXANES PLUS	0.3
FORMATION	PERM-SEVEN RIVERS	NITROGEN	5.6
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3550	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	2.9
		HELIUM	0.04
		HEATING VALUE*	1.134
		SPECIFIC GRAVITY	0.742

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20473	COMPONENT, MOLE PCT	
STATE _____	NEW MEXICO	METHANE _____	66.1
COUNTY _____	LEA	ETHANE _____	10.8
FIELD _____	JALMAT	PROPANE _____	8.0
WELL NAME _____	STATE H NO. 5	N-BUTANE _____	3.1
API _____	3002534529	ISOBUTANE _____	1.3
LOCATION _____	SEC. 17, T22S, R36E	N-PENTANE _____	1.0
OWNER _____	DOYLE HARTMAN	ISOPENTANE _____	1.0
COMPLETED _____	981231	CYCLOPENTANE _____	--
SAMPLED _____	001128	HEXANES PLUS _____	1.4
FORMATION _____	PERM-SEVEN RIVERS	NITROGEN _____	1.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	3607	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.7
OPEN FLOW, MCFD _____	394	CARBON DIOXIDE _____	5.5
		HELIUM _____	0.10
		HEATING VALUE* _____	1.355
		SPECIFIC GRAVITY _____	0.888

SAMPLE	20043	COMPONENT, MOLE PCT	
STATE _____	NEW MEXICO	METHANE _____	83.2
COUNTY _____	LEA	ETHANE _____	9.6
FIELD _____	JOHNSON RANCH	PROPANE _____	3.7
WELL NAME _____	TRISTE DRAW 34 STATE NO. 1	N-BUTANE _____	1.3
API _____	3002534502	ISOBUTANE _____	0.5
LOCATION _____	SEC. 34, T24S, R33E	N-PENTANE _____	0.2
OWNER _____	EOG RESOURCES	ISOPENTANE _____	0.3
COMPLETED _____	980930	CYCLOPENTANE _____	--
SAMPLED _____	991209	HEXANES PLUS _____	0.3
FORMATION _____	PERM-WOLF CAMP	NITROGEN _____	0.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	13636	ARGON _____	TRACE
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____	1350	HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____	4200	CARBON DIOXIDE _____	0.2
		HELIUM _____	0.00
		HEATING VALUE* _____	1.213
		SPECIFIC GRAVITY _____	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20469	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.4
COUNTY _____	LEA	ETHANE _____ 7.1
FIELD _____	GEM N	PROPANE _____ 4.0
WELL NAME _____	SUN BRIGHT FEDERAL NO. 1	N-BUTANE _____ 1.7
API _____	3002529140	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 21, T19S, R33E	N-PENTANE _____ 1.0
OWNER _____	E G L RESOURCES, INC.	ISOPENTANE _____ 1.0
COMPLETED _____	000331	CYCLOPENTANE _____ --
SAMPLED _____	001128	HEXANES PLUS _____ 1.8
FORMATION _____	PERM-WOLF CAMP	NITROGEN _____ 0.6
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11108	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	15	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.294
		SPECIFIC GRAVITY _____ 0.756

SAMPLE	20476	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 74.2
COUNTY _____	LEA	ETHANE _____ 10.7
FIELD _____	RHODES	PROPANE _____ 5.9
WELL NAME _____	H.G. MOBERLY C FEDERAL NO. 1	N-BUTANE _____ 2.2
API _____	3002511993	ISOBUTANE _____ 0.9
LOCATION _____	SEC. 17, T26S, R37E	N-PENTANE _____ 0.8
OWNER _____	LANEXCO, INC.	ISOPENTANE _____ 1.0
COMPLETED _____	290311	CYCLOPENTANE _____ --
SAMPLED _____	001128	HEXANES PLUS _____ 1.9
FORMATION _____	PERM-YATES	NITROGEN _____ 1.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3075	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.354
		SPECIFIC GRAVITY _____ 0.806

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20482	COMPONENT, MOLE PCT	
STATE	<u>NEW MEXICO</u>	METHANE	<u>71.0</u>
COUNTY	<u>LEA</u>	ETHANE	<u>10.7</u>
FIELD	<u>JALMAT</u>	PROPANE	<u>7.4</u>
WELL NAME	<u>MYERS B FED. NO. 33</u>	N-BUTANE	<u>3.1</u>
API	<u>3002525973</u>	ISOBUTANE	<u>1.3</u>
LOCATION	<u>SEC. 7, T24S, R37E</u>	N-PENTANE	<u>1.0</u>
OWNER	<u>DOYLE HARTMAN</u>	ISOPENTANE	<u>1.1</u>
COMPLETED	<u>780726</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>001129</u>	HEXANES PLUS	<u>1.5</u>
FORMATION	<u>PERM-YATES</u>	NITROGEN	<u>1.3</u>
GEOLOGIC PROVINCE CODE	<u>430</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3207</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>580</u>	CARBON DIOXIDE	<u>1.7</u>
		HELIUM	<u>0.11</u>
		HEATING VALUE*	<u>1.389</u>
		SPECIFIC GRAVITY	<u>0.844</u>
<hr/>			
SAMPLE	20480	COMPONENT, MOLE PCT	
STATE	<u>NEW MEXICO</u>	METHANE	<u>70.0</u>
COUNTY	<u>LEA</u>	ETHANE	<u>11.3</u>
FIELD	<u>JALMAT</u>	PROPANE	<u>7.6</u>
WELL NAME	<u>LANGLIE C FEDERAL NO. 1</u>	N-BUTANE	<u>3.0</u>
API	<u>3002525898</u>	ISOBUTANE	<u>1.3</u>
LOCATION	<u>SEC. 9, T25S, R37E</u>	N-PENTANE	<u>0.8</u>
OWNER	<u>OCCIDENTAL PERMIAN LTD.</u>	ISOPENTANE	<u>1.1</u>
COMPLETED	<u>790706</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>001129</u>	HEXANES PLUS	<u>1.2</u>
FORMATION	<u>PERM-YATES & SEVEN RIVERS</u>	NITROGEN	<u>1.0</u>
GEOLOGIC PROVINCE CODE	<u>430</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3130</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.5</u>
OPEN FLOW, MCFD	<u>279</u>	CARBON DIOXIDE	<u>2.2</u>
		HELIUM	<u>0.00</u>
		HEATING VALUE*	<u>1.377</u>
		SPECIFIC GRAVITY	<u>0.845</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20474	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 75.2
COUNTY _____	LEA	ETHANE _____ 11.9
FIELD _____	EUMONT	PROPANE _____ 5.7
WELL NAME _____	ELLIOTT B NO. 8	N-BUTANE _____ 1.8
API _____	3002510333	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 17, T22S, R37E	N-PENTANE _____ 0.5
OWNER _____	ZIA ENERGY, INC.	ISOPENTANE _____ 0.4
COMPLETED _____	380805	CYCLOPENTANE _____ --
SAMPLED _____	001128	HEXANES PLUS _____ 0.7
FORMATION _____	PERM-YATES, SVN, RVRS, QUEEN	NITROGEN _____ 2.3
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3480	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	58	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1,264
		SPECIFIC GRAVITY _____ 0.759
SAMPLE	20657	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 79.8
COUNTY _____	RIO ARRIBA	ETHANE _____ 10.7
FIELD _____	BASIN	PROPANE _____ 4.8
WELL NAME _____	SAN JUAN 28-6 UNIT NO. 99	N-BUTANE _____ 1.3
API _____	3003908141	ISOBUTANE _____ 0.9
LOCATION _____	SEC. 24, T28N, R6W	N-PENTANE _____ 0.3
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.4
COMPLETED _____	651014	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-DAKOTA	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7749	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	2678	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	4048	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.08
		HEATING VALUE* _____ 1,237
		SPECIFIC GRAVITY _____ 0.718

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20659	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	84.2
COUNTY	RIO ARRIBA	ETHANE	8.7
FIELD	BASIN	PROPANE	3.1
WELL NAME	SAN JUAN 28-5 UNIT NO. 58M	N-BUTANE	1.0
API	3003925597	ISOBUTANE	0.7
LOCATION	SEC. 30, T28N, R5W	N-PENTANE	0.2
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.3
COMPLETED	970122	CYCLOPENTANE	--
SAMPLED	010412	HEXANES PLUS	0.5
FORMATION	CRET-DAKOTA, MESAVERDE	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7792	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	510	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2205	CARBON DIOXIDE	1.1
		HELIUM	0.06
		HEATING VALUE*	1.182
		SPECIFIC GRAVITY	0.682

SAMPLE	20663	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	83.0
COUNTY	RIO ARRIBA	ETHANE	0.3
FIELD	BASIN	PROPANE	0.0
WELL NAME	SAN JUAN 29-5 UNIT NO. 226	N-BUTANE	TRACE
API	3003925076	ISOBUTANE	TRACE
LOCATION	SEC. 7, T29N, R5W	N-PENTANE	0.0
OWNER	PHILLIPS PETROLEUM CO., NW	ISOPENTANE	0.0
COMPLETED	921001	CYCLOPENTANE	--
SAMPLED	010412	HEXANES PLUS	TRACE
FORMATION	CRET-FRUITLAND	NITROGEN	0.0
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3330	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1200	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	328	CARBON DIOXIDE	16.6
		HELIUM	TRACE
		HEATING VALUE*	847
		SPECIFIC GRAVITY	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20664	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	76.3
COUNTY	RIO ARRIBA	ETHANE	0.3
FIELD	BASIN	PROPANE	0.0
WELL NAME	SAN JUAN 30-6 UNIT NO. 459	N-BUTANE	0.0
API	3003924289	ISOBUTANE	0.0
LOCATION	SEC. 20 T30N R6W	N-PENTANE	0.0
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.0
COMPLETED	881007	CYCLOPENTANE	—
SAMPLED	010412	HEXANES PLUS	0.0
FORMATION	CRET-FRUITLAND	NITROGEN	0.0
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3157	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	356	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	103	CARBON DIOXIDE	23.4
		HELIUM	TRACE
		HEATING VALUE*	777
		SPECIFIC GRAVITY	0.782

SAMPLE	20662	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	88.8
COUNTY	RIO ARRIBA	ETHANE	5.8
FIELD	BASIN	PROPANE	1.9
WELL NAME	SAN JUAN 29-5 UNIT NO. 32M	N-BUTANE	0.5
API	3003925817	ISOBUTANE	0.4
LOCATION	SEC. 29 T29N R5W	N-PENTANE	0.1
OWNER	PHILLIPS PETROLEUM CO. NW	ISOPENTANE	0.2
COMPLETED	991019	CYCLOPENTANE	—
SAMPLED	010412	HEXANES PLUS	0.3
FORMATION	CRET-MESAVERDE	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5905	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	313	CARBON DIOXIDE	1.6
		HELIUM	0.04
		HEATING VALUE*	1.110
		SPECIFIC GRAVITY	0.644

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20660	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 82.4
COUNTY _____	RIO ARRIBA	ETHANE _____ 9.8
FIELD _____	BLANCO	PROPANE _____ 3.9
WELL NAME _____	SAN JUAN 28-5 UNIT NO. 14A	N-BUTANE _____ 1.0
API _____	3003922205	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 20, T28N, R5W	N-PENTANE _____ 0.3
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	000530	CYCLOPENTANE _____ -
SAMPLED _____	010412	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5000	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1,199
		SPECIFIC GRAVITY _____ 0.693

SAMPLE	20656	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.6
COUNTY _____	RIO ARRIBA	ETHANE _____ 10.3
FIELD _____	BLANCO	PROPANE _____ 4.1
WELL NAME _____	SAN JUAN 28-6 UNIT NO. 5A	N-BUTANE _____ 1.0
API _____	3003921869	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 14, T28N, R6W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	790728	CYCLOPENTANE _____ -
SAMPLED _____	010412	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5875	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	663	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1841	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1,207
		SPECIFIC GRAVITY _____ 0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20658	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.4
COUNTY _____	RIO ARRIBA	ETHANE _____ 10.2
FIELD _____	BLANCO	PROPANE _____ 4.0
WELL NAME _____	SAN JUAN 28.6 UNIT NO. 65	N-BUTANE _____ 1.1
API _____	3003907375	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 24, T28N, R6W	N-PENTANE _____ 0.3
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.4
COMPLETED _____	561108	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ 0.5
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5730	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1032	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3897	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1,214
		SPECIFIC GRAVITY _____ 0.703

SAMPLE	20872	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.6
COUNTY _____	RIO ARRIBA	ETHANE _____ 10.1
FIELD _____	BLANCO	PROPANE _____ 4.2
WELL NAME _____	JICARILLA 96 NO. 6C	N-BUTANE _____ 1.1
API _____	3003926549	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 2, T26N, R3W	N-PENTANE _____ 0.3
OWNER _____	ENERGEN RESOURCES CORP.	ISOPENTANE _____ 0.3
COMPLETED _____	010417	CYCLOPENTANE _____ --
SAMPLED _____	011003	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5477	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.2
WELLHEAD PRESSURE, PSIG _____	1190	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	636	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1,213
		SPECIFIC GRAVITY _____ 0.699

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20661	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 82.8
COUNTY	RIO ARRIBA	ETHANE 9.6
FIELD	BASIN	PROPANE 3.7
WELL NAME	SAN JUAN 28-5 UNIT NO. 33	N-BUTANE 1.0
API	3003907413	ISOBUTANE 0.6
LOCATION	SEC. 17, T28N, R5W	N-PENTANE 0.3
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE 0.3
COMPLETED	590624	CYCLOPENTANE --
SAMPLED	010412	HEXANES PLUS 0.3
FORMATION	CRET-MESAVERDE, DAKOTA	NITROGEN 0.3
GEOLOGIC PROVINCE CODE	580	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	8041	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	2699	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	5518	CARBON DIOXIDE 1.0
		HELIUM 0.06
		HEATING VALUE* 1.194
		SPECIFIC GRAVITY 0.689

SAMPLE	20580	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 63.0
COUNTY	ROOSEVELT	ETHANE 11.1
FIELD	ALLISON	PROPANE 7.7
WELL NAME	EL ZORRO NO. 1	N-BUTANE 2.7
API	3004120797	ISOBUTANE 1.1
LOCATION	SEC. 25, T8S, R36E	N-PENTANE 0.5
OWNER	LAYTON ENTERPRISES, INC.	ISOPENTANE 0.5
COMPLETED	860201	CYCLOPENTANE --
SAMPLED	001221	HEXANES PLUS 0.5
FORMATION	PENN-CISCO	NITROGEN 10.6
GEOLOGIC PROVINCE CODE	430	OXYGEN 1.1
TRUE VERTICAL DEPTH (FT)	9614	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	102	CARBON DIOXIDE 1.1
		HELIUM 0.09
		HEATING VALUE* 1.217
		SPECIFIC GRAVITY 0.835

* CALCULATED GROSS BTU PER CU FT, DRY, AT 80 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20578	COMPONENT, MOLE PCT	
STATE _____	NEW MEXICO	METHANE _____	74.3
COUNTY _____	ROOSEVELT	ETHANE _____	7.3
FIELD _____	BLUITT	PROPANE _____	3.0
WELL NAME _____	BLUITT SAN ANDRES 18 FEDERAL NO. 14	N-BUTANE _____	0.8
API _____	3004120855	ISOBUTANE _____	0.4
LOCATION _____	SEC. 18, T8S, R38E	N-PENTANE _____	0.2
OWNER _____	SAGA PETROLEUM LLC	ISOPENTANE _____	0.2
COMPLETED _____	900601	CYCLOPENTANE _____	--
SAMPLED _____	001221	HEXANES PLUS _____	0.3
FORMATION _____	PERM-SAN ANDRES	NITROGEN _____	6.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	4712	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.1
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____	6.6
		HELIUM _____	0.07
		HEATING VALUE* _____	1.026
		SPECIFIC GRAVITY _____	0.745

SAMPLE	20574	COMPONENT, MOLE PCT	
STATE _____	NEW MEXICO	METHANE _____	74.2
COUNTY _____	ROOSEVELT	ETHANE _____	7.0
FIELD _____	BLUITT	PROPANE _____	2.9
WELL NAME _____	FEDERAL BL 1	N-BUTANE _____	0.7
API _____	3004110135	ISOBUTANE _____	0.3
LOCATION _____	SEC. 8, T8S, R37E	N-PENTANE _____	0.2
OWNER _____	BRECK OPERATING CORP.	ISOPENTANE _____	0.2
COMPLETED _____	641115	CYCLOPENTANE _____	--
SAMPLED _____	001221	HEXANES PLUS _____	0.3
FORMATION _____	PERM-SAN ANDRES	NITROGEN _____	7.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	4445	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.2
OPEN FLOW, MCFD _____	85	CARBON DIOXIDE _____	6.3
		HELIUM _____	0.08
		HEATING VALUE* _____	1.014
		SPECIFIC GRAVITY _____	0.743

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20575	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 75.8
COUNTY _____	ROOSEVELT	ETHANE _____ 7.7
FIELD _____	BLUITT	PROPANE _____ 4.0
WELL NAME _____	FEDERAL C NO. 1	N-BUTANE _____ 1.6
API _____	3004120402	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 4, T8S, R37E	N-PENTANE _____ 0.5
OWNER _____	H.L. BROWN OPERATING, LLC	ISOPENTANE _____ 0.4
COMPLETED _____	751205	CYCLOPENTANE _____ -
SAMPLED _____	001221	HEXANES PLUS _____ 0.6
FORMATION _____	PERM-WOLECAMP	NITROGEN _____ 8.6
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8011	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	7680	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.21
		HEATING VALUE* _____ 1.139
		SPECIFIC GRAVITY _____ 0.734

SAMPLE	20863	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 87.4
COUNTY _____	SAN JUAN	ETHANE _____ 6.9
FIELD _____	BLANCO	PROPANE _____ 2.2
WELL NAME _____	PAYNE NO. 5	N-BUTANE _____ 0.6
API _____	3004511280	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 27, T32N, R10W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.2
COMPLETED _____	600607	CYCLOPENTANE _____ -
SAMPLED _____	011003	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-CLIFF HOUSE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6262	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	671	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	5212	CARBON DIOXIDE _____ 1.7
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.123
		SPECIFIC GRAVITY _____ 0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED H2S MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20858	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	88.3
COUNTY	SAN JUAN	ETHANE	6.0
FIELD	BLANCO	PROPANE	1.8
WELL NAME	SAN JUAN 32-9 UNIT NO. 38	N-BUTANE	0.5
API	3004511192	ISOBUTANE	0.3
LOCATION	SEC. 35, T32N, R10W	N-PENTANE	0.1
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.2
COMPLETED	560922	CYCLOPENTANE	--
SAMPLED	011002	HEXANES PLUS	0.3
FORMATION	CRET-CLIFF HOUSE	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5420	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1050	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	5389	CARBON DIOXIDE	2.2
		HELIUM	0.03
		HEATING VALUE*	1.099
		SPECIFIC GRAVITY	0.647
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SAMPLE	20864	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	95.0
COUNTY	SAN JUAN	ETHANE	0.3
FIELD	BASIN	PROPANE	TRACE
WELL NAME	PAYNE NO. 4-A	N-BUTANE	TRACE
API	3004523911	ISOBUTANE	TRACE
LOCATION	SEC. 22, T32N, R10W	N-PENTANE	0.0
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.0
COMPLETED	800812	CYCLOPENTANE	--
SAMPLED	011003	HEXANES PLUS	TRACE
FORMATION	CRET-DAKOTA	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8353	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	2748	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3950	CARBON DIOXIDE	4.4
		HELIUM	0.02
		HEATING VALUE*	968
		SPECIFIC GRAVITY	0.6

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20647	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.8</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.6</u>
FIELD _____	<u>UTE DOME</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>UTE INDIANS A NO. 1B</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>3004524609</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 35, T32N, R14W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>XTO ENERGY INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>810326</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____ <u>0.7</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2268</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>576</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1539</u>	CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>1.164</u>
		SPECIFIC GRAVITY _____ <u>0.667</u>
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SAMPLE	20632	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>80.7</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>11.9</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>3.9</u>
WELL NAME _____	<u>FARFEL U 1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>3004529426</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 19, T25N, R11W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>ELM RIDGE RESOURCES</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>970414</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____ <u>0.9</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5784</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>113</u>	CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>1.202</u>
		SPECIFIC GRAVITY _____ <u>0.693</u>

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20848	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 92.2
COUNTY _____	SAN JUAN	ETHANE _____ 3.0
FIELD _____	BASIN	PROPANE _____ 0.8
WELL NAME _____	PAYNE NO. 2-A	N-BUTANE _____ 0.2
API _____	3004523910	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 21, T32N, R10W	N-PENTANE _____ 0.1
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.1
COMPLETED _____	800903	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.1
FORMATION _____	CRET-DAKOTA, MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7718	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	645	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2445	CARBON DIOXIDE _____ 3.2
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.031
		SPECIFIC GRAVITY _____ 0.618

SAMPLE	20655	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 82.6
COUNTY _____	SAN JUAN	ETHANE _____ 0.4
FIELD _____	BASIN	PROPANE _____ 0.0
WELL NAME _____	HOWELL E NO. 300	N-BUTANE _____ TRACE
API _____	300452691B	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 14, T30N, R8W	N-PENTANE _____ 0.0
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.0
COMPLETED _____	880910	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ TRACE
FORMATION _____	CRET-FRUITLAND	NITROGEN _____ 0.0
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2719	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	888	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1896	CARBON DIOXIDE _____ 17.0
		HELIUM _____ TRACE
		HEATING VALUE* _____ 844
		SPECIFIC GRAVITY _____ 0.72

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20652	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>92.3</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>4.4</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>1.5</u>
WELL NAME _____	<u>FLORENCE 1.19 NO. 120</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3004528727</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 21, T29N, R9W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CONOCO, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>930422</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-FRUITLAND</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1964</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>130</u>	CARBON DIOXIDE _____ <u>0.9</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1,075</u>
		SPECIFIC GRAVITY _____ <u>0.611</u>

SAMPLE	20633	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>79.4</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>0.3</u>
FIELD _____	<u>CEDAR HILL</u>	PROPANE _____ <u>0.0</u>
WELL NAME _____	<u>F.C. DECKER PRIMO COM 2 UNIT H</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3004527480</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC. 19, T32N, R10W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>CONOCO, INC.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>910411</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010410</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-FRUITLAND COAL</u>	NITROGEN _____ <u>0.0</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2848</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1764</u>	CARBON DIOXIDE _____ <u>20.2</u>
		HELIUM _____ <u>TRACE</u>
		HEATING VALUE* _____ <u>810</u>
		SPECIFIC GRAVITY _____ <u>0.751</u>

* CALCULATED GROSS BTU PER CU FT, DRY AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20871	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 75.9
COUNTY _____	SAN JUAN	ETHANE _____ 9.1
FIELD _____	TOCITO DOME	PROPANE _____ 4.0
WELL NAME _____	NAVAJO TRIBAL "N" NO. 1	N-BUTANE _____ 1.4
API _____	3004505809	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 17, T26N, R18W	N-PENTANE _____ 0.4
OWNER _____	ROBERT L. BAYLESS	ISOPENTANE _____ 0.4
COMPLETED _____	630421	CYCLOPENTANE _____ --
SAMPLED _____	011003	HEXANES PLUS _____ 0.8
FORMATION _____	PENN-HERMOSA	NITROGEN _____ 5.7
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6410	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	5077	CARBON DIOXIDE _____ 1.1
		HELIUM _____ 0.50
		HEATING VALUE* _____ 1,169
		SPECIFIC GRAVITY _____ 0.734

SAMPLE	20648	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 68.4
COUNTY _____	SAN JUAN	ETHANE _____ 3.3
FIELD _____	BARKER DOME	PROPANE _____ 1.1
WELL NAME _____	UTE MOUNTAIN NO. 40	N-BUTANE _____ 0.4
API _____	3004529354	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 20, T32N, R14W	N-PENTANE _____ 0.1
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.1
COMPLETED _____	960805	CYCLOPENTANE _____ --
SAMPLED _____	010411	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-ISMAV PARADOX	NITROGEN _____ 19.0
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 3.2
TRUE VERTICAL DEPTH (FT) _____	7430	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1800	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2595	CARBON DIOXIDE _____ 3.5
		HELIUM _____ 0.35
		HEATING VALUE* _____ 824
		SPECIFIC GRAVITY _____ 0.73

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20846	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	92.6
COUNTY	SAN JUAN	ETHANE	3.2
FIELD	BLANCO	PROPANE	0.8
WELL NAME	PAYNE NO. 1-A	N-BUTANE	0.2
API	3004522172	ISOBUTANE	0.2
LOCATION	SEC. 20, T32N, R10W	N-PENTANE	0.1
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.1
COMPLETED	780720	CYCLOPENTANE
SAMPLED	011002	HEXANES PLUS	0.1
FORMATION	CRET-MESAVERDE	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5515	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	5769	CARBON DIOXIDE	2.7
		HELIUM	0.01
		HEATING VALUE*	1.037
		SPECIFIC GRAVITY	0.614

SAMPLE	20861	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	91.4
COUNTY	SAN JUAN	ETHANE	4.4
FIELD	BLANCO	PROPANE	1.1
WELL NAME	SAN JUAN 32-9 UNIT NO. 49A	N-BUTANE	0.3
API	3004529443	ISOBUTANE	0.2
LOCATION	SEC. 23, T32N, R10W	N-PENTANE	0.1
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.1
COMPLETED	970823	CYCLOPENTANE
SAMPLED	011003	HEXANES PLUS	0.2
FORMATION	CRET-MESAVERDE	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6327	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1643	CARBON DIOXIDE	2.2
		HELIUM	0.01
		HEATING VALUE*	1.062
		SPECIFIC GRAVITY	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20869	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>95.9</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>1.3</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>0.2</u>
WELL NAME _____	<u>SAN JUAN 32-9 UNIT NO. 75</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3004511427</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 18, T32N, R9W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>600607</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6040</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>1021</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2559</u>	CARBON DIOXIDE _____ <u>2.3</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.004</u>
		SPECIFIC GRAVITY _____ <u>0.587</u>

SAMPLE	20850	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>90.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>4.8</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>1.4</u>
WELL NAME _____	<u>PAGE 1-A</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>3004522455</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 18, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>770624</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5514</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>863</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>3322</u>	CARBON DIOXIDE _____ <u>2.1</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.076</u>
		SPECIFIC GRAVITY _____ <u>0.63</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20849	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 90.7
COUNTY _____	SAN JUAN	ETHANE _____ 4.8
FIELD _____	BLANCO	PROPANE _____ 1.3
WELL NAME _____	VANDERSLICE NO. 2Y	N-BUTANE _____ 0.3
API _____	3004520996	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 18, T32N, R10W	N-PENTANE _____ 0.1
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.1
COMPLETED _____	930821	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.2
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5430	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	875	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	123	CARBON DIOXIDE _____ 2.2
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.070
		SPECIFIC GRAVITY _____ 0.627

SAMPLE	20844	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 95.1
COUNTY _____	SAN JUAN	ETHANE _____ 1.6
FIELD _____	BLANCO	PROPANE _____ 0.1
WELL NAME _____	HARRISON NO. 1	N-BUTANE _____ TRACE
API _____	3004511124	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 31, T32N, R10W	N-PENTANE _____ 0.0
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ TRACE
COMPLETED _____	690325	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ TRACE
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5060	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	788	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3632	CARBON DIOXIDE _____ 2.9
		HELIUM _____ 0.02
		HEATING VALUE* _____ 997
		SPECIFIC GRAVITY _____ 0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20865	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 88.8
COUNTY	SAN JUAN	ETHANE 6.2
FIELD	BASIN	PROPANE 1.9
WELL NAME	PAYNE NO. 4-A	N-BUTANE 0.5
API	3004523911	ISOBUTANE 0.3
LOCATION	SEC. 22, T32N, R10W	N-PENTANE 0.1
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE 0.1
COMPLETED	800812	CYCLOPENTANE -
SAMPLED	011003	HEXANES PLUS 0.2
FORMATION	CRET-MESAVERDE	NITROGEN 0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6298	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	754	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	2784	CARBON DIOXIDE 1.7
		HELIUM 0.03
		HEATING VALUE* 1.102
		SPECIFIC GRAVITY 0.641

SAMPLE	20870	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 88.3
COUNTY	SAN JUAN	ETHANE 6.2
FIELD	BLANCO	PROPANE 2.0
WELL NAME	SAN JUAN 32-9 UNIT NO. 68	N-BUTANE 0.5
API	3004511316	ISOBUTANE 0.3
LOCATION	SEC. 24, T32N, R10W	N-PENTANE 0.1
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE 0.2
COMPLETED	590423	CYCLOPENTANE -
SAMPLED	011003	HEXANES PLUS 0.3
FORMATION	CRET-MESAVERDE	NITROGEN 0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	8040	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	1020	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	6919	CARBON DIOXIDE 2.0
		HELIUM 0.03
		HEATING VALUE* 1.105
		SPECIFIC GRAVITY 0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20847	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	88.5
COUNTY	SAN JUAN	ETHANE	5.8
FIELD	BLANCO	PROPANE	1.9
WELL NAME	PAYNE NO. 3-E	N-BUTANE	0.5
API	3004527543	ISOBUTANE	0.4
LOCATION	SEC. 20, T32N, R10W	N-PENTANE	0.1
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.2
COMPLETED	971115	CYCLOPENTANE	--
SAMPLED	011002	HEXANES PLUS	0.3
FORMATION	CRET-MESAVERDE	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5701	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	434	CARBON DIOXIDE	2.3
		HELIUM	0.03
		HEATING VALUE*	1,098
		SPECIFIC GRAVITY	0.648

SAMPLE	20845	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	89.7
COUNTY	SAN JUAN	ETHANE	5.0
FIELD	BASIN	PROPANE	1.6
WELL NAME	PAYNE NO. 1-B	N-BUTANE	0.4
API	3004530432	ISOBUTANE	0.3
LOCATION	SEC. 20, T32N, R10W	N-PENTANE	0.1
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.1
COMPLETED	010319	CYCLOPENTANE	--
SAMPLED	011002	HEXANES PLUS	0.2
FORMATION	CRET-MESAVERDE	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5644	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	307	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2506	CARBON DIOXIDE	2.4
		HELIUM	0.03
		HEATING VALUE*	1,082
		SPECIFIC GRAVITY	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20653	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>82.8</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.6</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.3</u>
WELL NAME _____	<u>HOWELL J NO. 3A</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3004521987</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 11, T30N, R8W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>760505</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>4.8</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5161</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>3660</u>	CARBON DIOXIDE _____ <u>1.9</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.074</u>
		SPECIFIC GRAVITY _____ <u>0.675</u>

SAMPLE	20654	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.9</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.0</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.4</u>
WELL NAME _____	<u>HOWELL E NO. 2B</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3004527563</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 14, T30N, R8W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>900915</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>0.0</u>
MEASURED DEPTH _____	<u>6664</u>	HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>121</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>12200</u>	CARBON DIOXIDE _____ <u>1.6</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.126</u>
		SPECIFIC GRAVITY _____ <u>0.658</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20866	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	86.8
COUNTY	SAN JUAN	ETHANE	7.2
FIELD	BLANCO	PROPANE	2.2
WELL NAME	SAN JUAN NO. 28-A	N-BUTANE	0.5
API	3004522916	ISOBUTANE	0.4
LOCATION	SEC. 26, T32N, R10W	N-PENTANE	0.1
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.2
COMPLETED	781017	CYCLOPENTANE	—
SAMPLED	011003	HEXANES PLUS	0.4
FORMATION	CRET-MESAVERDE	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6357	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	712	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1587	CARBON DIOXIDE	1.9
		HELIUM	0.04
		HEATING VALUE*	1,126
		SPECIFIC GRAVITY	0.659

SAMPLE	20869	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	86.9
COUNTY	SAN JUAN	ETHANE	7.1
FIELD	BLANCO	PROPANE	2.5
WELL NAME	HOWELL A NO. 3	N-BUTANE	0.7
API	3004509794	ISOBUTANE	0.4
LOCATION	SEC. 4, T30N, R8W	N-PENTANE	0.2
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.2
COMPLETED	940125	CYCLOPENTANE	—
SAMPLED	010412	HEXANES PLUS	0.4
FORMATION	CRET-MESAVERDE	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5374	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	1.5
		HELIUM	0.04
		HEATING VALUE*	1,138
		SPECIFIC GRAVITY	0.66

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20852	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 85.8
COUNTY _____	SAN JUAN	ETHANE _____ 7.8
FIELD _____	BLANCO	PROPANE _____ 2.7
WELL NAME _____	VANDERSIICE NO. 1	N-BUTANE _____ 0.7
API _____	3004511365	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 19 T32N R10W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.2
COMPLETED _____	700822	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5240	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	864	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2542	CARBON DIOXIDE _____ 1.8
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.140
		SPECIFIC GRAVITY _____ 0.666

SAMPLE	20860	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.2
COUNTY _____	SAN JUAN	ETHANE _____ 7.4
FIELD _____	BLANCO	PROPANE _____ 2.5
WELL NAME _____	SAN JUAN 32-9 UNIT NO. 9A	N-BUTANE _____ 0.7
API _____	3004529736	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 25 T32N R10W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.2
COMPLETED _____	991022	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6102	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	497	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2085	CARBON DIOXIDE _____ 1.8
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.136
		SPECIFIC GRAVITY _____ 0.664

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20851	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 85.6
COUNTY _____	SAN JUAN	ETHANE _____ 7.8
FIELD _____	BLANCO	PROPANE _____ 2.7
WELL NAME _____	VANDERSLICE NO. 1-B	N-BUTANE _____ 0.7
API _____	3004530014	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 19 T32N R10W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.2
COMPLETED _____	000324	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5440	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	187	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	217	CARBON DIOXIDE _____ 1.8
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.144
		SPECIFIC GRAVITY _____ 0.669

SAMPLE	20857	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 85.7
COUNTY _____	SAN JUAN	ETHANE _____ 7.8
FIELD _____	BLANCO	PROPANE _____ 2.6
WELL NAME _____	SAN JUAN 32-9 UNIT NO. 34A	N-BUTANE _____ 0.7
API _____	3004522917	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 35 T32N R10W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.2
COMPLETED _____	780717	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5636	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	576	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2779	CARBON DIOXIDE _____ 1.8
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.140
		SPECIFIC GRAVITY _____ 0.667

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20859	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 85.2
COUNTY	SAN JUAN	ETHANE 7.9
FIELD	BLANCO	PROPANE 2.8
WELL NAME	SAN JUAN 32-9 UNIT NO. 9	N-BUTANE 0.8
API	3004511219	ISOBUTANE 0.5
LOCATION	SEC. 25, T32N, R10W	N-PENTANE 0.2
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE 0.3
COMPLETED	610802	CYCLOPENTANE -
SAMPLED	011002	HEXANES PLUS 0.4
FORMATION	CRET-MESAVERDE	NITROGEN 0.3
GEOLOGIC PROVINCE CODE	580	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	5650	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	981	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	483	CARBON DIOXIDE 1.7
		HELIUM 0.05
		HEATING VALUE* 1.151
		SPECIFIC GRAVITY 0.674

SAMPLE	20856	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 84.3
COUNTY	SAN JUAN	ETHANE 8.5
FIELD	BLANCO	PROPANE 3.0
WELL NAME	SCOTT NO. 5R	N-BUTANE 0.8
API	3004528519	ISOBUTANE 0.5
LOCATION	SEC. 34, T32N, R10W	N-PENTANE 0.2
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE 0.3
COMPLETED	910904	CYCLOPENTANE -
SAMPLED	011002	HEXANES PLUS 0.5
FORMATION	CRET-MESAVERDE	NITROGEN 0.2
GEOLOGIC PROVINCE CODE	580	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	5635	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	550	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	18992	CARBON DIOXIDE 1.7
		HELIUM 0.05
		HEATING VALUE* 1.163
		SPECIFIC GRAVITY 0.68

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20855	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	84.2
COUNTY	SAN JUAN	ETHANE	8.6
FIELD	BLANCO	PROPANE	3.0
WELL NAME	SCOTT NO. 5A	N-BUTANE	0.8
API	3004522547	ISOBUTANE	0.5
LOCATION	SEC. 34, T32N, R10W	N-PENTANE	0.2
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.3
COMPLETED	770913	CYCLOPENTANE	—
SAMPLED	011002	HEXANES PLUS	0.4
FORMATION	CRET-MESAVERDE	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5408	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	199	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4933	CARBON DIOXIDE	1.7
		HELIUM	0.06
		HEATING VALUE*	1.166
		SPECIFIC GRAVITY	0.681

SAMPLE	20853	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	83.3
COUNTY	SAN JUAN	ETHANE	9.2
FIELD	BLANCO	PROPANE	3.3
WELL NAME	SCOTT NO. 7-A	N-BUTANE	0.9
API	3004521967	ISOBUTANE	0.6
LOCATION	SEC. 3, T31N, R10W	N-PENTANE	0.2
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.3
COMPLETED	760707	CYCLOPENTANE	—
SAMPLED	011002	HEXANES PLUS	0.4
FORMATION	CRET-MESAVERDE	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5337	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	705	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4133	CARBON DIOXIDE	1.6
		HELIUM	0.06
		HEATING VALUE*	1.178
		SPECIFIC GRAVITY	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20668	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	83.4
COUNTY	SAN JUAN	ETHANE	9.1
FIELD	BLANCO	PROPANE	3.8
WELL NAME	HOWELL C NO. 3C	N-BUTANE	1.0
API	3004530009	ISOBUTANE	0.7
LOCATION	SEC. 7, T30N, R8W	N-PENTANE	0.3
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.3
COMPLETED	000416	CYCLOPENTANE	—
SAMPLED	010412	HEXANES PLUS	0.5
FORMATION	CRET-MESAVERDE	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5298	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	370	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	870	CARBON DIOXIDE	0.7
		HELIUM	0.07
		HEATING VALUE*	1.200
		SPECIFIC GRAVITY	0.688

SAMPLE	20843	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	82.3
COUNTY	SAN JUAN	ETHANE	9.1
FIELD	BLANCO	PROPANE	3.7
WELL NAME	HARRISON NO. 1-R	N-BUTANE	1.1
API	3004529533	ISOBUTANE	0.7
LOCATION	SEC. 31, T32N, R10W	N-PENTANE	0.3
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.4
COMPLETED	980514	CYCLOPENTANE	—
SAMPLED	011002	HEXANES PLUS	0.4
FORMATION	CRET-MESAVERDE	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5786	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	317	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1150	CARBON DIOXIDE	1.9
		HELIUM	0.07
		HEATING VALUE*	1.192
		SPECIFIC GRAVITY	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20651	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	79.2
COUNTY	SAN JUAN	ETHANE	10.8
FIELD	BLANCO	PROPANE	5.0
WELL NAME	FLORENCE NO. 41	N-BUTANE	1.4
API	3004508105	ISOBUTANE	0.8
LOCATION	SEC. 21 T29N R9W	N-PENTANE	0.4
OWNER	CONOCO, INC.	ISOPENTANE	0.4
COMPLETED	510806	CYCLOPENTANE	-
SAMPLED	010412	HEXANES PLUS	0.5
FORMATION	CRET-MESAVERDE	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4694	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1090	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3120	CARBON DIOXIDE	1.1
		HELIUM	0.09
		HEATING VALUE*	1.246
		SPECIFIC GRAVITY	0.725
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SAMPLE	20670	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	86.3
COUNTY	SAN JUAN	ETHANE	7.3
FIELD	BLANCO	PROPANE	2.7
WELL NAME	WOODRIVER NO. 2	N-BUTANE	0.7
API	3004513226	ISOBUTANE	0.5
LOCATION	SEC. 9 T30N R8W	N-PENTANE	0.2
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE	0.3
COMPLETED	560227	CYCLOPENTANE	-
SAMPLED	010412	HEXANES PLUS	0.4
FORMATION	CRET-MESAVERDE MANCOS	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4865	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1055	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	11500	CARBON DIOXIDE	1.5
		HELIUM	0.05
		HEATING VALUE*	1.147
		SPECIFIC GRAVITY	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20868	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 78.0
COUNTY	SAN JUAN	ETHANE 8.7
FIELD	TOCITO DOME	PROPANE 3.5
WELL NAME	NAVAJO TRIBAL "N" NO. 11	N-BUTANE 1.1
API	3004520583	ISOBUTANE 0.6
LOCATION	SEC. 17, T26N, R18W	N-PENTANE 0.3
OWNER	ROBERT L. BAYLESS	ISOPENTANE 0.3
COMPLETED	700130	CYCLOPENTANE --
SAMPLED	011003	HEXANES PLUS 0.5
FORMATION	PENN-PARADOX	NITROGEN 5.4
GEOLOGIC PROVINCE CODE	580	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6390	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	271	CARBON DIOXIDE 1.1
		HELIUM 0.47
		HEATING VALUE* 1.137
		SPECIFIC GRAVITY 0.71

SAMPLE	20867	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 89.5
COUNTY	SAN JUAN	ETHANE 5.5
FIELD	BLANCO	PROPANE 1.6
WELL NAME	SAN JUAN NO. 39	N-BUTANE 0.4
API	3004511286	ISOBUTANE 0.3
LOCATION	SEC. 26, T32N, R10W	N-PENTANE 0.1
OWNER	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE 0.2
COMPLETED	561017	CYCLOPENTANE --
SAMPLED	011003	HEXANES PLUS 0.3
FORMATION	CRET-PICTURED CLIFFS	NITROGEN 0.1
GEOLOGIC PROVINCE CODE	580	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6197	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	1022	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	12095	CARBON DIOXIDE 2.0
		HELIUM 0.03
		HEATING VALUE* 1.088
		SPECIFIC GRAVITY 0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20854	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.6</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>5.5</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.0</u>
WELL NAME _____	<u>SCOTT NO. 12</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3004521822</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 3, T31N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>750925</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2806</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>944</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2999</u>	CARBON DIOXIDE _____ <u>1.4</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.103</u>
		SPECIFIC GRAVITY _____ <u>0.637</u>

SAMPLE	20862	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>88.8</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.2</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>SAN JUAN NO. 27</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3004511314</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 23, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>551111</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6109</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>970</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>3400</u>	CARBON DIOXIDE _____ <u>1.7</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.104</u>
		SPECIFIC GRAVITY _____ <u>0.642</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20927	COMPONENT, MOLE PCT	
STATE _____	<u>NEW MEXICO</u>	METHANE _____	0.0
COUNTY _____	<u>SOCORRO</u>	ETHANE _____	0.0
FIELD _____	<u>WILDCAT</u>	PROPANE _____	0.0
WELL NAME _____	<u>DULCE DRAW STATE NO. 1</u>	N-BUTANE _____	0.0
API _____	<u>3005320014</u>	ISOBUTANE _____	0.0
LOCATION _____	<u>SEC. 2, T4S, R9E</u>	N-PENTANE _____	0.0
OWNER _____	<u>PRIMERO OPERATING, INC.</u>	ISOPENTANE _____	0.0
COMPLETED _____	<u>010431</u>	CYCLOPENTANE _____	--
SAMPLED _____	<u>010808</u>	HEXANES PLUS _____	0.0
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____	8.3
GEOLOGIC PROVINCE CODE _____	<u>465</u>	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	<u>2846</u>	ARGON _____	0.2
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____	91.4
		HELIUM _____	0.09
		HEATING VALUE* _____	0
		SPECIFIC GRAVITY _____	1.472

SAMPLE	20873	COMPONENT, MOLE PCT	
STATE _____	<u>NEW MEXICO</u>	METHANE _____	0.8
COUNTY _____	<u>SOCORRO</u>	ETHANE _____	0.0
FIELD _____	<u>WILDCAT</u>	PROPANE _____	0.0
WELL NAME _____	<u>DULCE DRAW STATE NO. 1</u>	N-BUTANE _____	0.0
API _____	<u>3005320014</u>	ISOBUTANE _____	0.0
LOCATION _____	<u>SEC. 2, T4S, R9E</u>	N-PENTANE _____	0.0
OWNER _____	<u>PRIMERO OPERATING, INC.</u>	ISOPENTANE _____	0.0
COMPLETED _____	<u>010431</u>	CYCLOPENTANE _____	--
SAMPLED _____	<u>010808</u>	HEXANES PLUS _____	0.0
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____	65.6
GEOLOGIC PROVINCE CODE _____	<u>465</u>	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	<u>2650</u>	ARGON _____	0.4
MEASURED DEPTH _____		HYDROGEN _____	TRACE
WELLHEAD PRESSURE, PSIG _____	<u>200</u>	HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____	31.1
		HELIUM _____	2.02
		HEATING VALUE* _____	9
		SPECIFIC GRAVITY _____	1.12

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20018	COMPONENT, MOLE PCT
STATE _____	OHIO	METHANE _____ 83.6
COUNTY _____	HOCKING	ETHANE _____ 4.5
FIELD _____	HAYNES	PROPANE _____ 1.9
WELL NAME _____	AZBELL NO. 2	N-BUTANE _____ 0.6
API _____	3407323485	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 5N. SALT CREEK TWP	N-PENTANE _____ 0.1
OWNER _____	COLUMBIA NATURAL RESOURCES, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	980608	CYCLOPENTANE _____ --
SAMPLED _____	981210	HEXANES PLUS _____ TRACE
FORMATION _____	ORDO-ROSE RUN	NITROGEN _____ 8.2
GEOLOGIC PROVINCE CODE _____	160	OXYGEN _____ 0.4
TRUE VERTICAL DEPTH (FT) _____	3530	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1330	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	5700	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.16
		HEATING VALUE* _____ 1,017
		SPECIFIC GRAVITY _____ 0.649

SAMPLE	20046	COMPONENT, MOLE PCT
STATE _____	OHIO	METHANE _____ 88.5
COUNTY _____	PORTAGE	ETHANE _____ 6.6
FIELD _____	RAVENNA	PROPANE _____ 2.7
WELL NAME _____	SHEWELL UNIT NO. P-11	N-BUTANE _____ 0.8
API _____	3413324209	ISOBUTANE _____ 0.3
LOCATION _____	EDINBURG TWP, ATWATER QUAD, LOT 4SW	N-PENTANE _____ 0.1
OWNER _____	EASTERN STATES OIL & GAS, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	980924	CYCLOPENTANE _____ --
SAMPLED _____	000211	HEXANES PLUS _____ 0.1
FORMATION _____	ORDO-ROSE RUN, KNOX	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	160	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7376	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	2550	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1200	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1,139
		SPECIFIC GRAVITY _____ 0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20726	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	75.8
COUNTY	CUSTER	ETHANE	13.4
FIELD	WEATHERFORD	PROPANE	6.3
WELL NAME	CRALL NO. 12-1	N-BUTANE	1.4
API	3503920567	ISOBUTANE	0.8
LOCATION	SEC. 12, T13N, R15W	N-PENTANE	0.4
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.4
COMPLETED	820322	CYCLOPENTANE	-
SAMPLED	010711	HEXANES PLUS	0.6
FORMATION	PENN-ATOKA	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	12246	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	800	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	950	CARBON DIOXIDE	0.6
		HELIUM	0.05
		HEATING VALUE*	1.291
		SPECIFIC GRAVITY	0.748

SAMPLE	20732	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	83.2
COUNTY	CUSTER	ETHANE	6.0
FIELD	FAYE	PROPANE	2.1
WELL NAME	MILTON NO. 1-25	N-BUTANE	0.4
API	3503921581	ISOBUTANE	0.3
LOCATION	SEC. 25, T15N, R14W	N-PENTANE	0.1
OWNER	MARSHALL OIL CORP.	ISOPENTANE	0.1
COMPLETED	940904	CYCLOPENTANE	-
SAMPLED	010711	HEXANES PLUS	0.3
FORMATION	PENN-ATOKA, MORROW	NITROGEN	5.5
GEOLOGIC PROVINCE CODE	380	OXYGEN	1.2
TRUE VERTICAL DEPTH (FT)	10766	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	4100	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1000	CARBON DIOXIDE	0.8
		HELIUM	0.03
		HEATING VALUE*	1.049
		SPECIFIC GRAVITY	0.562

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20705	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 88.8
COUNTY _____	CLUSTER	ETHANE _____ 6.0
FIELD _____	HAMMON E	PROPANE _____ 2.1
WELL NAME _____	WHITE NO. 1-13	N-BUTANE _____ 0.4
API _____	3503921437	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 13, T13N, R20W	N-PENTANE _____ 0.1
OWNER _____	APACHE CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	920928	CYCLOPENTANE _____ —
SAMPLED _____	010709	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-CHEROKEE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13000	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4633	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	785	CARBON DIOXIDE _____ 1.1
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1,121
		SPECIFIC GRAVITY _____ 0.645

SAMPLE	20707	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 79.8
COUNTY _____	CLUSTER	ETHANE _____ 10.5
FIELD _____	HAMMON E	PROPANE _____ 5.0
WELL NAME _____	SMITH B21 NO. 2	N-BUTANE _____ 1.4
API _____	3503921375	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 21, T14N, R20W	N-PENTANE _____ 0.3
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.4
COMPLETED _____	900409	CYCLOPENTANE _____ --
SAMPLED _____	010709	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-CHEROKEE	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	12242	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	6517	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	700	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1,238
		SPECIFIC GRAVITY _____ 0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20725	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 78.4
COUNTY _____	CLUSTER	ETHANE _____ 10.4
FIELD _____	WEATHERFORD	PROPANE _____ 6.1
WELL NAME _____	HORSE CREEK NO. 13-1	N-BUTANE _____ 1.5
API _____	3503821652	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 13, T13N, R15W	N-PENTANE _____ 0.5
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.4
COMPLETED _____	960805	CYCLOPENTANE _____ --
SAMPLED _____	010711	HEXANES PLUS _____ 0.6
FORMATION _____	PENN. CHEROKEE	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11330	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3900	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3822	CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.56
		HEATING VALUE* _____ 1.267
		SPECIFIC GRAVITY _____ 0.736
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SAMPLE	20734	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 95.8
COUNTY _____	CLUSTER	ETHANE _____ 2.2
FIELD _____	CLINTON S.	PROPANE _____ 0.3
WELL NAME _____	CLINTON NO. 13-31	N-BUTANE _____ TRACE
API _____	3503920825	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 31, T12N, R16W	N-PENTANE _____ TRACE
OWNER _____	PETRO ENGINEERING, INC.	ISOPENTANE _____ TRACE
COMPLETED _____	821108	CYCLOPENTANE _____ --
SAMPLED _____	010711	HEXANES PLUS _____ TRACE
FORMATION _____	PENN. MORROW	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	15472	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	9500	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2025	CARBON DIOXIDE _____ 1.3
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.019
		SPECIFIC GRAVITY _____ 0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE 20726		COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	87.9
COUNTY	CLUSTER	ETHANE	6.7
FIELD	CLUSTER CITY E	PROPANE	2.4
WELL NAME	DECKER NO. 1-23	N-BUTANE	0.5
API	3503920338	ISOBUTANE	0.5
LOCATION	SEC. 23, T14N, R15W	N-PENTANE	0.1
OWNER	WARREN AMERICAN OIL CO.	ISOPENTANE	0.2
COMPLETED	800709	CYCLOPENTANE	--
SAMPLED	010711	HEXANES PLUS	0.4
FORMATION	PENN-MORROW	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	12708	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	3000	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1150	CARBON DIOXIDE	0.8
		HELIUM	0.04
		HEATING VALUE*	1.132
		SPECIFIC GRAVITY	0.649

SAMPLE 20727		COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	91.8
COUNTY	CLUSTER	ETHANE	4.8
FIELD	CLUSTER CITY E	PROPANE	1.2
WELL NAME	BLACK WOLF NO. 1-25	N-BUTANE	0.3
API	3503920485	ISOBUTANE	0.2
LOCATION	SEC. 25, T14N, R15W	N-PENTANE	0.1
OWNER	WARREN AMERICAN OIL CO.	ISOPENTANE	0.1
COMPLETED	811101	CYCLOPENTANE	--
SAMPLED	010711	HEXANES PLUS	0.2
FORMATION	PENN-MORROW, SPRINGER	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	13016	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	408	CARBON DIOXIDE	1.0
		HELIUM	0.03
		HEATING VALUE*	1.074
		SPECIFIC GRAVITY	0.615

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20730	COMPONENT, MOLE PCT
STATE	OKLAHOMA	METHANE 83.1
COUNTY	CLUSTER	ETHANE 8.6
FIELD	FAY E	PROPANE 4.1
WELL NAME	CATTLE 4-D NO. 1-24	N-BUTANE 1.1
API	3503920156	ISOBUTANE 0.7
LOCATION	SEC. 24, T15N, R14W	N-PENTANE 0.2
OWNER	APACHE CORP.	ISOPENTANE 0.4
COMPLETED	770616	CYCLOPENTANE --
SAMPLED	010711	HEXANES PLUS 0.5
FORMATION	PENN-MORROW, SPRINGER	NITROGEN 0.4
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	10897	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	872	CARBON DIOXIDE 0.8
		HELIUM 0.05
		HEATING VALUE* 1.204
		SPECIFIC GRAVITY 0.694

SAMPLE	20729	COMPONENT, MOLE PCT
STATE	OKLAHOMA	METHANE 87.3
COUNTY	CLUSTER	ETHANE 6.8
FIELD	THOMAS S.	PROPANE 2.7
WELL NAME	HALLE NO. 1-7	N-BUTANE 0.7
API	3503920956	ISOBUTANE 0.4
LOCATION	SEC. 7, T14N, R14W	N-PENTANE 0.2
OWNER	UNIT PETROLEUM CO.	ISOPENTANE 0.2
COMPLETED	831004	CYCLOPENTANE --
SAMPLED	010711	HEXANES PLUS 0.5
FORMATION	PENN-RED FORK	NITROGEN 0.5
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	10885	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	350	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	300	CARBON DIOXIDE 0.7
		HELIUM 0.04
		HEATING VALUE* 1.145
		SPECIFIC GRAVITY 0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20731	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 83.7
COUNTY _____	CLUSTER	ETHANE _____ 8.3
FIELD _____	FAYE	PROPANE _____ 4.0
WELL NAME _____	KENT NO. 1-24	N-BUTANE _____ 1.0
API _____	3503921461	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 24 T15N R14W	N-PENTANE _____ 0.2
OWNER _____	MARSHALL OIL CORP.	ISOPENTANE _____ 0.4
COMPLETED _____	920821	CYCLOPENTANE _____
SAMPLED _____	010711	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-SPRINGER	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	10990	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4600	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1750	CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.197
		SPECIFIC GRAVITY _____ 0.69

SAMPLE	20721	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 84.1
COUNTY _____	DEWEY	ETHANE _____ 8.8
FIELD _____	PUTNAM	PROPANE _____ 3.3
WELL NAME _____	SHIRLEY NO. 1-22	N-BUTANE _____ 0.8
API _____	3504321704	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 22 T17N R18W	N-PENTANE _____ 0.2
OWNER _____	EXOK, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	830802	CYCLOPENTANE _____
SAMPLED _____	010710	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	10750	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3020	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.175
		SPECIFIC GRAVITY _____ 0.68

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20715	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	93.6
COUNTY	DEWEY	ETHANE	3.5
FIELD	NOBSCOT NW	PROPANE	0.9
WELL NAME	FRANS USA NO. 1	N-BUTANE	0.2
API	3504321760	ISOBUTANE	0.1
LOCATION	SEC. 10, T16N, R15W	N-PENTANE	0.1
OWNER	VERNON E. FAULCONER INC.	ISOPENTANE	0.1
COMPLETED	830823	CYCLOPENTANE	—
SAMPLED	010710	HEXANES PLUS	0.2
FORMATION	PENN-MORROW	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10243	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	2245	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1297	CARBON DIOXIDE	1.0
		HELIUM	0.04
		HEATING VALUE*	1.058
		SPECIFIC GRAVITY	0.602

SAMPLE	20720	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	79.9
COUNTY	DEWEY	ETHANE	10.6
FIELD	PUTNAM	PROPANE	4.8
WELL NAME	SHIRLEY NO. 4-22	N-BUTANE	1.2
API	3504322517	ISOBUTANE	0.7
LOCATION	SEC. 22, T17N, R18W	N-PENTANE	0.4
OWNER	EXOK INC.	ISOPENTANE	0.4
COMPLETED	960121	CYCLOPENTANE	—
SAMPLED	010710	HEXANES PLUS	0.5
FORMATION	PENN-MORROW	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10786	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	4000	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	377	CARBON DIOXIDE	1.0
		HELIUM	0.06
		HEATING VALUE*	1.233
		SPECIFIC GRAVITY	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20718	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	80.6
COUNTY	DEWEY	ETHANE	10.4
FIELD	PUTNAM	PROPANE	4.5
WELL NAME	GORE UNIT NO. 1-23	N-BUTANE	1.2
API	3504320618	ISOBUTANE	0.6
LOCATION	SEC. 23, T17N, R18W	N-PENTANE	0.4
OWNER	CONTINENTAL OPERATING CO.	ISOPENTANE	0.4
COMPLETED	750923	CYCLOPENTANE
SAMPLED	010710	HEXANES PLUS	0.8
FORMATION	PENN-OSWEGO	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9248	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1506	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1250	CARBON DIOXIDE	0.7
		HELIUM	0.05
		HEATING VALUE*	1.239
		SPECIFIC GRAVITY	0.718
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SAMPLE	20722	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	71.1
COUNTY	DEWEY	ETHANE	14.5
FIELD	PUTNAM	PROPANE	7.9
WELL NAME	FAIRCHILD A NO. 1	N-BUTANE	2.1
API	3504350100	ISOBUTANE	1.0
LOCATION	SEC. 8, T17N, R19W	N-PENTANE	0.6
OWNER	CHESAPEAKE OPERATING INC.	ISOPENTANE	0.6
COMPLETED	640116	CYCLOPENTANE
SAMPLED	010710	HEXANES PLUS	0.7
FORMATION	PENN-OSWEGO	NITROGEN	0.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9494	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	4128	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3174	CARBON DIOXIDE	0.9
		HELIUM	0.05
		HEATING VALUE*	1.355
		SPECIFIC GRAVITY	0.795

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20724	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	76.5
COUNTY	DEWEY	ETHANE	11.9
FIELD	PUTNAM	PROPANE	5.9
WELL NAME	GOVERNMENT-SPAID NO. 1-5	N-BUTANE	1.7
API	3504350098	ISOBUTANE	0.8
LOCATION	SEC. 5, T17N, R19W	N-PENTANE	0.5
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.5
COMPLETED	630320	CYCLOPENTANE	--
SAMPLED	010710	HEXANES PLUS	0.8
FORMATION	PENN-OSWEGO	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9436	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	4372	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	5500	CARBON DIOXIDE	0.8
		HELIUM	0.07
		HEATING VALUE*	1.292
		SPECIFIC GRAVITY	0.753
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SAMPLE	20719	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	78.7
COUNTY	DEWEY	ETHANE	10.7
FIELD	PUTNAM	PROPANE	5.2
WELL NAME	COLLIER ESTATE NO. 1	N-BUTANE	1.4
API	3504320543	ISOBUTANE	0.7
LOCATION	SEC. 21, T17N, R18W	N-PENTANE	0.4
OWNER	VERNON E. FAULKNER, INC.	ISOPENTANE	0.4
COMPLETED	741117	CYCLOPENTANE	--
SAMPLED	010710	HEXANES PLUS	0.8
FORMATION	PENN-TONKAWA	NITROGEN	1.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7826	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1585	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	387	CARBON DIOXIDE	0.5
		HELIUM	0.12
		HEATING VALUE*	1.254
		SPECIFIC GRAVITY	0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20022	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	98.3
COUNTY	KIOWA	ETHANE	1.0
FIELD	MOUNTAIN VIEW W.	PROPANE	0.2
WELL NAME	HAWKINS NO. 1-13	N-BUTANE	TRACE
API	3507521917	ISOBUTANE	TRACE
LOCATION	SEC. 13, T7N, R15W	N-PENTANE	0.0
OWNER	CIMAREX ENERGY CO.	ISOPENTANE	TRACE
COMPLETED	980618	CYCLOPENTANE	--
SAMPLED	990111	HEXANES PLUS	TRACE
FORMATION	PENN-SPRINGER (OVERTURNED)	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	350	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11391	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	4250	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	31000	CARBON DIOXIDE	0.3
		HELIUM	0.02
		HEATING VALUE*	1.020
		SPECIFIC GRAVITY	0.565
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SAMPLE	20874	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	94.4
COUNTY	LATIMER	ETHANE	0.6
FIELD	WILBURTON	PROPANE	TRACE
WELL NAME	YOURMAN NO. 7-15	N-BUTANE	0.0
API	3507721167	ISOBUTANE	0.0
LOCATION	SEC. 15, T5N, R18E	N-PENTANE	0.0
OWNER	BP AMERICA PRODUCTION CO.	ISOPENTANE	0.0
COMPLETED	001003	CYCLOPENTANE	--
SAMPLED	011011	HEXANES PLUS	0.0
FORMATION	PENN-CROMWELL 2	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	345	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11462	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1770	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1558	CARBON DIOXIDE	4.6
		HELIUM	0.04
		HEATING VALUE*	968
		SPECIFIC GRAVITY	0.603

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20788	COMPONENT, MOLE PCT	
STATE _____	<u>OKLAHOMA</u>	METHANE _____	72.6
COUNTY _____	<u>LINCOLN</u>	ETHANE _____	10.3
FIELD _____	<u>RED MOUND W</u>	PROPANE _____	5.4
WELL NAME _____	<u>WILKERSON NO. 2-3</u>	N-BUTANE _____	1.0
API _____	<u>3508123598</u>	ISOBUTANE _____	0.4
LOCATION _____	<u>SEC. 3, T15N, R2E</u>	N-PENTANE _____	0.1
OWNER _____	<u>MARJO OPERATING CO., INC.</u>	ISOPENTANE _____	0.1
COMPLETED _____	<u>001115</u>	CYCLOPENTANE _____	--
SAMPLED _____	<u>010813</u>	HEXANES PLUS _____	TRACE
FORMATION _____	<u>DEVO-HUNTON</u>	NITROGEN _____	9.2
GEOLOGIC PROVINCE CODE _____	<u>355</u>	OXYGEN _____	0.8
TRUE VERTICAL DEPTH (FT) _____		ARGON _____	0.0
MEASURED DEPTH _____	<u>6276</u>	HYDROGEN _____	TRACE
WELLHEAD PRESSURE, PSIG _____	<u>950</u>	HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____	<u>1170</u>	CARBON DIOXIDE _____	0.1
		HELIUM _____	0.09
		HEATING VALUE* _____	1.104
		SPECIFIC GRAVITY _____	0.722

SAMPLE	20409	COMPONENT, MOLE PCT	
STATE _____	<u>OKLAHOMA</u>	METHANE _____	81.8
COUNTY _____	<u>MAJOR</u>	ETHANE _____	8.6
FIELD _____	<u>RINGWOOD</u>	PROPANE _____	3.8
WELL NAME _____	<u>FISHER NO. 8</u>	N-BUTANE _____	1.4
API _____	<u>3509323677</u>	ISOBUTANE _____	0.5
LOCATION _____	<u>SEC. 3, T20N, R10W</u>	N-PENTANE _____	0.5
OWNER _____	<u>ONEOK RESOURCES CO.</u>	ISOPENTANE _____	0.4
COMPLETED _____	<u>920825</u>	CYCLOPENTANE _____	--
SAMPLED _____	<u>001023</u>	HEXANES PLUS _____	1.0
FORMATION _____	<u>CAMO-ARBUCKLE</u>	NITROGEN _____	1.2
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	<u>9291</u>	ARGON _____	TRACE
MEASURED DEPTH _____		HYDROGEN _____	TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____	0.8
		HELIUM _____	0.03
		HEATING VALUE* _____	1.222
		SPECIFIC GRAVITY _____	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20410	COMPONENT, MOLE PCT	
STATE _____	OKLAHOMA	METHANE _____	73.6
COUNTY _____	MAJOR	ETHANE _____	11.7
FIELD _____	RINGWOOD	PROPANE _____	5.8
WELL NAME _____	FISHER NO. 4	N-BUTANE _____	2.5
API _____	3509320854	ISOBUTANE _____	0.8
LOCATION _____	SEC. 3, T20N, R10W	N-PENTANE _____	1.2
OWNER _____	ONEOK RESOURCES CO.	ISOPENTANE _____	0.7
COMPLETED _____	740321	CYCLOPENTANE _____	--
SAMPLED _____	001023	HEXANES PLUS _____	1.9
FORMATION _____	DEVO-HUNTON	NITROGEN _____	1.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	8086	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____	4835	CARBON DIOXIDE _____	0.4
		HELIUM _____	0.06
		HEATING VALUE* _____	1.372
		SPECIFIC GRAVITY _____	0.811

SAMPLE	20411	COMPONENT, MOLE PCT	
STATE _____	OKLAHOMA	METHANE _____	60.7
COUNTY _____	MAJOR	ETHANE _____	16.8
FIELD _____	AMES SE	PROPANE _____	10.1
WELL NAME _____	COLLEY NO. 2	N-BUTANE _____	4.0
API _____	3509320578	ISOBUTANE _____	1.3
LOCATION _____	SEC. 19, T20N, R10W	N-PENTANE _____	1.6
OWNER _____	ONEOK RESOURCES CO.	ISOPENTANE _____	0.9
COMPLETED _____	710917	CYCLOPENTANE _____	--
SAMPLED _____	001023	HEXANES PLUS _____	3.2
FORMATION _____	DEVO-HUNTON	NITROGEN _____	1.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____	0.0
MEASURED DEPTH _____	8344	HYDROGEN _____	0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____	0.3
		HELIUM _____	0.10
		HEATING VALUE* _____	1.587
		SPECIFIC GRAVITY _____	0.949

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20412	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>83.2</u>
COUNTY _____	<u>MAJOR</u>	ETHANE _____ <u>8.1</u>
FIELD _____	<u>RINGWOOD</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>FISHER NO. 1</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>3509320171</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 3, T20N, R10W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>ONEOK RESOURCES CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>800508</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>001023</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN LIME</u>	NITROGEN _____ <u>0.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7748</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>380</u>	CARBON DIOXIDE _____ <u>0.7</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.212</u>
		SPECIFIC GRAVITY _____ <u>0.705</u>

SAMPLE	20451	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>74.9</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>LONG NO. B1</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3513900489</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 12, T4N, R15E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CONOCO INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>460425</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>001108</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>12.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2800</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>30919</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.36</u>
		HEATING VALUE* _____ <u>1.050</u>
		SPECIFIC GRAVITY _____ <u>0.712</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20450	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	74.8
COUNTY	TEXAS	ETHANE	6.7
FIELD	GUYMON-HUGOTON	PROPANE	3.7
WELL NAME	TARVER NO. 1	N-BUTANE	1.1
API	3513900488	ISOBUTANE	0.4
LOCATION	SEC. 2 T4N R15E	N-PENTANE	0.3
OWNER	CONOCO INC.	ISOPENTANE	0.2
COMPLETED	451130	CYCLOPENTANE	—
SAMPLED	001108	HEXANES PLUS	0.3
FORMATION	PERM-CHASE GROUP	NITROGEN	12.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2775	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	383	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	31909	CARBON DIOXIDE	0.1
		HELIUM	0.36
		HEATING VALUE*	1.051
		SPECIFIC GRAVITY	0.713
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SAMPLE	20740	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	73.8
COUNTY	TEXAS	ETHANE	6.6
FIELD	GUYMON-HUGOTON	PROPANE	3.7
WELL NAME	TILGHMAN NO. 1	N-BUTANE	1.1
API	3513900567	ISOBUTANE	0.5
LOCATION	SEC. 28 T1N R13E	N-PENTANE	0.3
OWNER	XTO ENERGY INC.	ISOPENTANE	0.2
COMPLETED	480520	CYCLOPENTANE	—
SAMPLED	010730	HEXANES PLUS	0.3
FORMATION	PERM-CHASE GROUP	NITROGEN	13.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2888	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	37	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	23	CARBON DIOXIDE	0.1
		HELIUM	0.46
		HEATING VALUE*	1.041
		SPECIFIC GRAVITY	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20741	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 72.8
COUNTY _____	TEXAS	ETHANE _____ 6.4
FIELD _____	GUYMON-HUGOTON	PROPANE _____ 3.6
WELL NAME _____	BURROWS GAS UNIT NO. D-1	N-BUTANE _____ 1.1
API _____	351390058000	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 20, T1N, R13E	N-PENTANE _____ 0.3
OWNER _____	XTO ENERGY, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	500116	CYCLOPENTANE _____ --
SAMPLED _____	010730	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 14.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2756	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	36	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	40	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.49
		HEATING VALUE* _____ 1.025
		SPECIFIC GRAVITY _____ 0.716

SAMPLE	20882	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 71.2
COUNTY _____	TEXAS	ETHANE _____ 6.3
FIELD _____	GUYMON-HUGOTON	PROPANE _____ 3.6
WELL NAME _____	STATE NO. 1-36	N-BUTANE _____ 1.1
API _____	3513921142	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 36, T1N, R12E	N-PENTANE _____ 0.2
OWNER _____	CRAWLEY PETROLEUM CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	781022	CYCLOPENTANE _____ --
SAMPLED _____	011030	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 16.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2955	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	245	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.57
		HEATING VALUE* _____ 1.002
		SPECIFIC GRAVITY _____ 0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20673	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	62.1
COUNTY	TEXAS	ETHANE	5.4
FIELD	GUYMON-HUGOTON	PROPANE	3.5
WELL NAME	BUZZARD NO. G-1	N-BUTANE	1.1
API	3513901074	ISOBUTANE	0.4
LOCATION	SEC. 20, T4N, R12E	N-PENTANE	0.2
OWNER	DONALD W. JACKSON	ISOPENTANE	0.2
COMPLETED	521106	CYCLOPENTANE
SAMPLED	010511	HEXANES PLUS	0.1
FORMATION	PERM-CHASE GROUP	NITROGEN	26.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2479	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	324	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2020	CARBON DIOXIDE	0.1
		HELIUM	0.68
		HEATING VALUE*	885
		SPECIFIC GRAVITY	0.754

SAMPLE	20015	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	78.2
COUNTY	TEXAS	ETHANE	5.0
FIELD	HOOKER N	PROPANE	1.7
WELL NAME	ALEX HILL NO. 34A	N-BUTANE	0.4
API	3513922835	ISOBUTANE	0.2
LOCATION	SEC. 34, T6N, R17ECM	N-PENTANE	TRACE
OWNER	RICKS EXPLORATION, INC.	ISOPENTANE	0.1
COMPLETED	980207	CYCLOPENTANE
SAMPLED	981201	HEXANES PLUS	TRACE
FORMATION	PERM-COUNCIL GROVE	NITROGEN	13.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.5
TRUE VERTICAL DEPTH (FT)	3162	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	600	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1600	CARBON DIOXIDE	0.1
		HELIUM	0.34
		HEATING VALUE*	952
		SPECIFIC GRAVITY	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20752	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>94.4</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>2.8</u>
FIELD _____	<u>RANGE SW</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>STEFFEN UNIT NO. 2</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>3513921220</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 19, T1N, R18E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>XTO ENERGY, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>790723</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010731</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7069</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>150</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>92</u>	CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.11</u>
		HEATING VALUE* _____ <u>1.062</u>
		SPECIFIC GRAVITY _____ <u>0.586</u>
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SAMPLE	20749	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>77.8</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>8.1</u>
FIELD _____	<u>CAMRICK</u>	PROPANE _____ <u>6.7</u>
WELL NAME _____	<u>JOE MORRIS NO. 1-B</u>	N-BUTANE _____ <u>2.3</u>
API _____	<u>3513935526</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 30, T2N, R19E</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>560111</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010730</u>	HEXANES PLUS _____ <u>0.9</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>1.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6542</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>1430</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>13300</u>	CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.16</u>
		HEATING VALUE* _____ <u>1.285</u>
		SPECIFIC GRAVITY _____ <u>0.757</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20756	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	80.7
COUNTY	TEXAS	ETHANE	5.9
FIELD	CAMRICK	PROPANE	5.1
WELL NAME	GRAVES NO. B-1	N-BUTANE	1.8
API	3513900002	ISOBUTANE	0.6
LOCATION	SEC. 26 T2N R18E	N-PENTANE	0.7
OWNER	CHESAPEAKE OPERATING INC.	ISOPENTANE	0.2
COMPLETED	551214	CYCLOPENTANE	--
SAMPLED	010731	HEXANES PLUS	1.0
FORMATION	PENN-MORROW	NITROGEN	2.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6457	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1065	CARBON DIOXIDE	0.6
		HELIUM	0.20
		HEATING VALUE*	1.231
		SPECIFIC GRAVITY	0.727

SAMPLE	20883	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	78.9
COUNTY	TEXAS	ETHANE	8.0
FIELD	TEXHOMA N	PROPANE	4.2
WELL NAME	SERIGHT NO. 1-36	N-BUTANE	1.5
API	3513921971	ISOBUTANE	0.5
LOCATION	SEC. 36 T1N R12E	N-PENTANE	0.6
OWNER	H & L OPERATING CO. LLP	ISOPENTANE	0.3
COMPLETED	850221	CYCLOPENTANE	--
SAMPLED	011030	HEXANES PLUS	0.7
FORMATION	PENN-MORROW	NITROGEN	5.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6743	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	180	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	456	CARBON DIOXIDE	0.3
		HELIUM	0.20
		HEATING VALUE*	1.176
		SPECIFIC GRAVITY	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20753	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 91.0
COUNTY _____	TEXAS	ETHANE _____ 2.6
FIELD _____	CAMRICK	PROPANE _____ 1.1
WELL NAME _____	MURRAY NO. 1	N-BUTANE _____ 0.2
API _____	3513921400	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 34, T1N, R18E	N-PENTANE _____ TRACE
OWNER _____	SPESS OIL CO.	ISOPENTANE _____ TRACE
COMPLETED _____	801030	CYCLOPENTANE _____ --
SAMPLED _____	010731	HEXANES PLUS _____ TRACE
FORMATION _____	PENN-VORROW	NITROGEN _____ 4.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6690	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	825	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1100	CARBON DIOXIDE _____ 0.5
		HELIUM _____ 0.31
		HEATING VALUE* _____ 1.006
		SPECIFIC GRAVITY _____ 0.803

SAMPLE	50583	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 87.3
COUNTY _____	TEXAS	ETHANE _____ 7.7
FIELD _____	GUYMON S.	PROPANE _____ 4.9
WELL NAME _____	ELLIOTT NO. 2-2	N-BUTANE _____ 1.5
API _____	3513923074	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 2, T2N, R15E CM.	N-PENTANE _____ 0.5
OWNER _____	REPUBLIC ENERGY, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	000114	CYCLOPENTANE _____ --
SAMPLED _____	000117	HEXANES PLUS _____ 0.8
FORMATION _____	PENN-TORONTO	NITROGEN _____ 16.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4332	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ --
OPEN FLOW, MCFD _____	3010	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.26
		HEATING VALUE* _____ 1.076
		SPECIFIC GRAVITY _____ 0.773

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	50584	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 69.4
COUNTY _____	TEXAS	ETHANE _____ 7.4
FIELD _____	TEXHOMA N	PROPANE _____ 4.4
WELL NAME _____	OAKES 25 NO. 1	N-BUTANE _____ 1.4
API _____	3513923078	ISOBUTANE _____ 0.4
LOCATION _____	SEC 25, T2N, R12ECM	N-PENTANE _____ 0.4
OWNER _____	EOG RESOURCES, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	991213	CYCLOPENTANE _____ --
SAMPLED _____	991229	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-TORONTO	NITROGEN _____ 15.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4414	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ --
OPEN FLOW, MCFD _____	1050	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.33
		HEATING VALUE* _____ 1.052
		SPECIFIC GRAVITY _____ 0.75

SAMPLE	20027	COMPONENT, MOLE PCT
STATE _____	OREGON	METHANE _____ 42.8
COUNTY _____	COLUMBIA	ETHANE _____ 0.0
FIELD _____	MIST	PROPANE _____ TRACE
WELL NAME _____	LONGVIEW FIBRE (APATOSAUR) NO 33-22-75	N-BUTANE _____ 0.0
API _____	3600900338	ISOBUTANE _____ 0.0
LOCATION _____	SEC 22, T7N, R5W	N-PENTANE _____ 0.0
OWNER _____	ENERFIN RESOURCES	ISOPENTANE _____ 0.0
COMPLETED _____	990210	CYCLOPENTANE _____ --
SAMPLED _____	990422	HEXANES PLUS _____ 0.0
FORMATION _____	EOCE-CLARK, WILSON	NITROGEN _____ 57.0
GEOLOGIC PROVINCE CODE _____	710	OXYGEN _____ 0.2
TRUE VERTICAL DEPTH (FT) _____	3011	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	662	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.01
		HEATING VALUE* _____ 434
		SPECIFIC GRAVITY _____ 0.791

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20702	COMPONENT, MOLE PCT
STATE _____	PENNSYLVANIA	METHANE _____ 94.0
COUNTY _____	INDIANA	ETHANE _____ 3.0
FIELD _____	CHERRY HILL	PROPANE _____ 0.5
WELL NAME _____	TRACT 67 (ENGLE) NO. 2	N-BUTANE _____ 0.1
API _____	3706332245	ISOBUTANE _____ 0.1
LOCATION SEC. B. BRUSH VALLEY 7.5 QUAD, CHRY. HILL TWP		N-PENTANE _____ TRACE
OWNER _____	SK OPERATING, INC.	ISOPENTANE _____ TRACE
COMPLETED _____	990331	CYCLOPENTANE _____ --
SAMPLED _____	010700	HEXANES PLUS _____ TRACE
FORMATION _____	DEVO-WRRN, SPC., BLTN. BRFD	NITROGEN _____ 2.0
GEOLOGIC PROVINCE CODE _____	160	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3085	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.2
WELLHEAD PRESSURE, PSIG _____	990	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1342	CARBON D OXIDE _____ TRACE
		HELIUM _____ 0.08
		HEATING VALUE* _____ 1.026
		SPECIFIC GRAVITY _____ 0.585

SAMPLE	20028	COMPONENT, MOLE PCT
STATE _____	PENNSYLVANIA	METHANE _____ 92.7
COUNTY _____	LAWRENCE	ETHANE _____ 2.9
FIELD _____	MERCER	PROPANE _____ 0.3
WELL NAME _____	BYLER NO. 24	N-BUTANE _____ 0.1
API _____	3707320183	ISOBUTANE _____ TRACE
LOCATION _____	SEC. B. NEW CASTLE NORTH 7.5 QUAD	N-PENTANE _____ 0.0
OWNER _____	ATLAS RESOURCES, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	980308	CYCLOPENTANE _____ --
SAMPLED _____	990419	HEXANES PLUS _____ 0.0
FORMATION _____	SILL. MEDINA, WHIRLPOOL	NITROGEN _____ 3.5
GEOLOGIC PROVINCE CODE _____	160	OXYGEN _____ 0.4
TRUE VERTICAL DEPTH (FT) _____	5988	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	800	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	810	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.08
		HEATING VALUE* _____ 1.002
		SPECIFIC GRAVITY _____ 0.59

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE REPRODUCIBLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20029	COMPONENT, MOLE PCT	
STATE	TENNESSEE	METHANE	79.4
COUNTY	CAMPBELL	ETHANE	8.3
FIELD	JELICO MOUNTAIN	PROPANE	4.2
WELL NAME	ROBERT SHARP NO. 1	N-BUTANE	1.3
API	4101320178	ISOBUTANE	0.4
LOCATION	4-A-65E	N-PENTANE	0.2
OWNER	MILLER PETROLEUM INC.	ISOPENTANE	0.2
COMPLETED	981019	CYCLOPENTANE	--
SAMPLED	990511	HEXANES PLUS	0.3
FORMATION	MISS-MONTEAGLE	NITROGEN	5.0
GEOLOGIC PROVINCE CODE	160	OXYGEN	TRACE
TRUE VERTICAL DEPTH (FT)	1824	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.3
WELLHEAD PRESSURE, PSIG	300	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	300	CARBON DIOXIDE	0.1
		HELIUM	0.26
		HEATING VALUE*	1.154
		SPECIFIC GRAVITY	0.696
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SAMPLE	50577	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	54.4
COUNTY	CLAY	ETHANE	1.8
FIELD	BARBARA M.	PROPANE	1.1
WELL NAME	MCCORMICK ED GRAF NO. 1	N-BUTANE	0.6
API	4207733802	ISOBUTANE	0.3
LOCATION	BLK 64, PCSL SUR. A-374	N-PENTANE	0.1
OWNER	PRODUCERS OPERATING CO., INC.	ISOPENTANE	0.2
COMPLETED	970731	CYCLOPENTANE	--
SAMPLED	981030	HEXANES PLUS	0.1
FORMATION	PENN-CISCO	NITROGEN	40.1
GEOLOGIC PROVINCE CODE	420	OXYGEN	--
TRUE VERTICAL DEPTH (FT)	1519	ARGON	--
MEASURED DEPTH		HYDROGEN	--
WELLHEAD PRESSURE, PSIG	400	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	412	CARBON DIOXIDE	0.1
		HELIUM	1.29
		HEATING VALUE*	660
		SPECIFIC GRAVITY	0.757

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20013	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 95.0
COUNTY	CROCKETT	ETHANE 1.5
FIELD	OZONA SW	PROPANE 0.3
WELL NAME	BEAN, VADA NO. 8-A	N-BUTANE 0.1
API	4210537930	ISOBUTANE 0.1
LOCATION	SEC. 14, BLK M, GC&SF SUR, A-4607	N-PENTANE TRACE
OWNER	HARRISON INTERESTS LIMITED	ISOPENTANE TRACE
COMPLETED	980212	CYCLOPENTANE --
SAMPLED	980928	HEXANES PLUS TRACE
FORMATION	DEVO-DEVONIAN, PENN-STRAWN	NITROGEN 0.9
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	9444	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	1089	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	4300	CARBON DIOXIDE 2.0
		HELIUM 0.04
		HEATING VALUE* 1.004
		SPECIFIC GRAVITY 0.592

SAMPLE	20919	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 96.3
COUNTY	CULBERSON	ETHANE 2.1
FIELD	FORD	PROPANE 0.3
WELL NAME	TEXAS PACIFIC LAND TRUST 23-1	N-BUTANE 0.1
API	4210932199	ISOBUTANE 0.1
LOCATION	SEC. 23, BLK 56, T1, T&PRR SUR, A-2650	N-PENTANE TRACE
OWNER	CONOCO, INC.	ISOPENTANE TRACE
COMPLETED	001012	CYCLOPENTANE --
SAMPLED	011101	HEXANES PLUS TRACE
FORMATION	PERM-WOLFECAMP M	NITROGEN 0.8
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	12052	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	3800	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	520	CARBON DIOXIDE 0.3
		HELIUM 0.01
		HEATING VALUE* 1.025
		SPECIFIC GRAVITY 0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20789	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 95.4
COUNTY _____	HEMPHILL	ETHANE _____ 0.9
FIELD _____	MENDOTA SE	PROPANE _____ 0.1
WELL NAME _____	ROSS AA No. 9-71	N-BUTANE _____ TRACE
API _____	4221132431	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 71, BLK A-2, H&GN SUR. A-122	N-PENTANE _____ 0.0
OWNER _____	CHEVRON U.S.A. INC.	ISOPENTANE _____ 0.0
COMPLETED _____	001121	CYCLOPENTANE _____ --
SAMPLED _____	010814	HEXANES PLUS _____ 0.0
FORMATION _____	PENN-MORROW U	NITROGEN _____ 1.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13277	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4225	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	5714	CARBON DIOXIDE _____ 2.0
		HELIUM _____ 0.03
		HEATING VALUE* _____ 985
		SPECIFIC GRAVITY _____ 0.58
SAMPLE	20014	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 45.5
COUNTY _____	LOVING	ETHANE _____ 0.0
FIELD _____	VERMEJO	PROPANE _____ 0.0
WELL NAME _____	GRAYLING GAS UNIT NO. 1	N-BUTANE _____ 0.0
API _____	4230130060	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 68, BLK 1, W&NW SUR. A-920	N-PENTANE _____ 0.0
OWNER _____	FOREST OIL CORP.	ISOPENTANE _____ 0.0
COMPLETED _____	980204	CYCLOPENTANE _____ --
SAMPLED _____	981013	HEXANES PLUS _____ 0.0
FORMATION _____	ORDO-ELLENBURGER	NITROGEN _____ 1.1
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	21004	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3140	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	50491	CARBON DIOXIDE _____ 53.2
		HELIUM _____ 0.03
		HEATING VALUE* _____ 461
		SPECIFIC GRAVITY _____ 1.078

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20772	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	71.6
COUNTY	POTTER	ETHANE	5.3
FIELD	TECOVAS CREEK	PROPANE	3.0
WELL NAME	MARSH RANCH 13-14, SEPARATOR, 2 INCH OF	N-BUTANE	1.0
API	4237531630	ISOBUTANE	0.5
LOCATION	SEC. 14, BLK 21W, EL&RR SUR	N-PENTANE	0.3
OWNER	SUNLIGHT EXPLORATION, INC.	ISOPENTANE	0.3
COMPLETED	010523	CYCLOPENTANE	-
SAMPLED	010808	HEXANES PLUS	0.6
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	14.8
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH	4991	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	200	CARBON DIOXIDE	1.8
		HELIUM	0.92
		HEATING VALUE*	990
		SPECIFIC GRAVITY	0.729

SAMPLE	20737	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	71.5
COUNTY	POTTER	ETHANE	4.9
FIELD	TECOVAS CREEK	PROPANE	2.6
WELL NAME	MARSH RANCH NO. 13-14, SEPARATOR GAS	N-BUTANE	1.0
API	4237531630	ISOBUTANE	0.4
LOCATION	SEC. 14, BLK 21W, EL&RR SUR	N-PENTANE	0.3
OWNER	SUNLIGHT EXPLORATION, INC.	ISOPENTANE	0.3
COMPLETED	010523	CYCLOPENTANE	-
SAMPLED	010720	HEXANES PLUS	0.5
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	15.7
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH	4991	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	200	CARBON DIOXIDE	1.6
		HELIUM	1.00
		HEATING VALUE*	970
		SPECIFIC GRAVITY	0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 50 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20773	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 71.9
COUNTY _____	POTTER	ETHANE _____ 5.0
FIELD _____	TEGOVAS CREEK	PROPANE _____ 2.7
WELL NAME _____	MARSH RANCH 13-14, CASING ANULLUS	N-BUTANE _____ 1.0
API _____	4237531630	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 14, BLK 21W, FL&RR SUR	N-PENTANE _____ 0.3
OWNER _____	SUNLIGHT EXPLORATION, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	010523	CYCLOPENTANE _____ -
SAMPLED _____	010808	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 15.3
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.1
MEASURED DEPTH _____	4991	HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	200	CARBON DIOXIDE _____ 1.7
		HELIUM _____ 1.03
		HEATING VALUE* _____ 969
		SPECIFIC GRAVITY _____ 0.72

SAMPLE	20672	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 72.0
COUNTY _____	POTTER	ETHANE _____ 4.7
FIELD _____	TEGOVAS CREEK	PROPANE _____ 2.4
WELL NAME _____	MARSH RANCH NO. 13-14	N-BUTANE _____ 0.8
API _____	4237531630	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 14, BLK 21W, FL&RR SUR	N-PENTANE _____ 0.2
OWNER _____	SUNLIGHT EXPLORATION, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	001025	CYCLOPENTANE _____ -
SAMPLED _____	010424	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 15.7
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3602	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	8	CARBON DIOXIDE _____ 2.0
		HELIUM _____ 1.04
		HEATING VALUE* _____ 949
		SPECIFIC GRAVITY _____ 0.716

* CALCULATED GROSS BTU PER CU FT 13BY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20790	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 73.1
COUNTY _____	POTTER	ETHANE _____ 4.8
FIELD _____	TECOVAS CREEK	PROPANE _____ 2.4
WELL NAME _____	MARSH RANCH 13-14 GAS SEPARATOR	N-BUTANE _____ 0.8
API _____	4237531630	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 14, BLK 21W, EL&RR SUR	N-PENTANE _____ 0.2
OWNER _____	SUNLIGHT EXPLORATION, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	010523	CYCLOPENTANE _____ --
SAMPLED _____	010824	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 15.7
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.1
MEASURED DEPTH _____	4991	HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	200	CARBON DIOXIDE _____ 1.1
		HELIUM _____ 1.05
		HEATING VALUE* _____ 949
		SPECIFIC GRAVITY _____ 0.702

SAMPLE	20610	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 64.3
COUNTY _____	POTTER	ETHANE _____ 3.6
FIELD _____	BIVINS RANCH	PROPANE _____ 1.4
WELL NAME _____	BIVINS RANCH 1-212	N-BUTANE _____ 0.4
API _____	4237531359	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 212, BLK 2, AB&M SUR	N-PENTANE _____ 0.1
OWNER _____	SAND RIVER O & F, LLC	ISOPENTANE _____ 0.1
COMPLETED _____	900615	CYCLOPENTANE _____ --
SAMPLED _____	010405	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 24.4
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3467	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 3.9
		HELIUM _____ 1.49
		HEATING VALUE* _____ 783
		SPECIFIC GRAVITY _____ 0.733

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20841	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	64.2
COUNTY	POTTER	ETHANE	3.6
FIELD	BIVINS RANCH	PROPANE	1.4
WELL NAME	BIVINS RANCH 1-212	N-BUTANE	0.4
API	4237531359	ISOBUTANE	0.2
LOCATION	SEC. 212, BLK 2, AB&M SUR.	N-PENTANE	0.1
OWNER	SAND RIVER O & F, LLC	ISOPENTANE	0.1
COMPLETED	900615	CYCLOPENTANE	--
SAMPLED	010913	HEXANES PLUS	0.1
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	24.5
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3467	ARGON	0.2
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	3.7
		HELIUM	1.50
		HEATING VALUE*	783
		SPECIFIC GRAVITY	0.733

SAMPLE	20842	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	62.5
COUNTY	POTTER	ETHANE	3.9
FIELD	BIVINS RANCH	PROPANE	1.8
WELL NAME	BIVINS RANCH 1A-212	N-BUTANE	0.5
API	4237531628	ISOBUTANE	0.3
LOCATION	SEC. 212, BLK 2, AB&M SUR.	N-PENTANE	0.1
OWNER	SAND RIVER O & F, LLC	ISOPENTANE	0.1
COMPLETED	010103	CYCLOPENTANE	--
SAMPLED	010913	HEXANES PLUS	0.1
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	28.2
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.2
MEASURED DEPTH	5170	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	18	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	43	CARBON DIOXIDE	0.5
		HELIUM	1.83
		HEATING VALUE*	786
		SPECIFIC GRAVITY	0.723

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20609	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 62.5
COUNTY	POTTER	ETHANE 3.9
FIELD	BIVINS RANCH	PROPANE 1.8
WELL NAME	BIVINS RANCH 1A-212	N-BUTANE 0.5
API	4237531628	ISOBUTANE 0.3
LOCATION	SEC. 212, BLK 2, AB&M SUR	N-PENTANE 0.1
OWNER	SAND RIVER O & E, LLC	ISOPENTANE 0.1
COMPLETED	010103	CYCLOPENTANE -
SAMPLED	010404	HEXANES PLUS 0.1
FORMATION	PERM-BROWN DOLOMITE	NITROGEN 28.4
GEOLOGIC PROVINCE CODE	440	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)		ARGON 0.1
MEASURED DEPTH	5170	HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	583	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	43	CARBON DIOXIDE 0.4
		HELIUM 1.87
		HEATING VALUE* 785
		SPECIFIC GRAVITY 0.722

SAMPLE	20523	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 62.0
COUNTY	POTTER	ETHANE 3.9
FIELD	BIVINS RANCH	PROPANE 1.8
WELL NAME	BIVINS RANCH 1A-212	N-BUTANE 0.5
API	4237531628	ISOBUTANE 0.3
LOCATION	SEC. 212, BLK 2, AB&M SUR	N-PENTANE 0.1
OWNER	SAND RIVER O & E, LLC	ISOPENTANE 0.1
COMPLETED	001128	CYCLOPENTANE -
SAMPLED	001219	HEXANES PLUS 0.1
FORMATION	PERM-BROWN DOLOMITE	NITROGEN 28.7
GEOLOGIC PROVINCE CODE	440	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3585	ARGON 0.2
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	18	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	43	CARBON DIOXIDE 0.5
		HELIUM 1.89
		HEATING VALUE* 781
		SPECIFIC GRAVITY 0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20026	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 97.8
COUNTY _____	REEVES	ETHANE _____ 0.6
FIELD _____	MI VIDA	PROPANE _____ 0.1
WELL NAME _____	HUMPHREY UNIT NO. 2	N-BUTANE _____ TRACE
API _____	4238932137	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 4, BLK 4, H&GN SUR, A-5273	N-PENTANE _____ TRACE
OWNER _____	TITAN RESOURCES I, INC.	ISOPENTANE _____ 0.0
COMPLETED _____	980605	CYCLOPENTANE _____ --
SAMPLED _____	990300	HEXANES PLUS _____ 0.0
FORMATION _____	PENN-ATOKA	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	14492	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	9300	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	6969	CARBON DIOXIDE _____ 1.3
		HELIUM _____ TRACE
		HEATING VALUE* _____ 1,004
		SPECIFIC GRAVITY _____ 0.572

SAMPLE	20002	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 90.3
COUNTY _____	REEVES	ETHANE _____ 0.9
FIELD _____	NINE MILE DRAW	PROPANE _____ 0.1
WELL NAME _____	NINE MILE DRAW 135507 NO. 1	N-BUTANE _____ 0.0
API _____	4238932104	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 13, BLK 55, T7, T&P SUR, A-135	N-PENTANE _____ 0.0
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.0
COMPLETED _____	970218	CYCLOPENTANE _____ 0.0
SAMPLED _____	971001	HEXANES PLUS _____ 0.0
FORMATION _____	SILU-FUSSELMAN, ORDO-MONTOYA	NITROGEN _____ 0.6
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ TRACE
TRUE VERTICAL DEPTH (FT) _____	14358	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	4671	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1696	CARBON DIOXIDE _____ 8.1
		HELIUM _____ 0.01
		HEATING VALUE* _____ 934
		SPECIFIC GRAVITY _____ 0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 50 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20009	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 72.2
COUNTY	STEPHENS	ETHANE 7.6
FIELD	WINSLOW	PROPANE 4.8
WELL NAME	GREEN NO. 1	N-BUTANE 1.2
API	4242835658	ISOBUTANE 0.4
LOCATION	P. SAMPSON SUR A-161	N-PENTANE 0.3
OWNER	TEXAS UNITED GEOPRODUCTION, INC.	ISOPENTANE 0.3
COMPLETED	970917	CYCLOPENTANE --
SAMPLED	980525	HEXANES PLUS 0.3
FORMATION	PENN-CADDO	NITROGEN 12.4
GEOLOGIC PROVINCE CODE	425	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3448	ARGON 0.2
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	1280	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	3060	CARBON DIOXIDE 0.3
		HELIUM 0.23
		HEATING VALUE* 1.085
		SPECIFIC GRAVITY 0.736

SAMPLE	20024	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 81.4
COUNTY	TERRELL	ETHANE 8.8
FIELD	K.M.	PROPANE 4.8
WELL NAME	MITCHELL STATE 10 NO. 4	N-BUTANE 1.6
API	4244330781	ISOBUTANE 0.6
LOCATION	SEC. 10, BLK 1 CCSD&RGNG SUR A-1677	N-PENTANE 0.3
OWNER	ENRON OIL & GAS CO.	ISOPENTANE 0.4
COMPLETED	980712	CYCLOPENTANE --
SAMPLED	990206	HEXANES PLUS 0.8
FORMATION	PERM-WOLFCAMP	NITROGEN 0.8
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.2
TRUE VERTICAL DEPTH (FT)	11462	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	4800	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	10900	CARBON DIOXIDE 0.5
		HELIUM 0.01
		HEATING VALUE* 1.245
		SPECIFIC GRAVITY 0.718

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20023	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	78.5
COUNTY	WHEELER	ETHANE	11.9
FIELD	MILLS RANCH	PROPANE	5.4
WELL NAME	BRYANT NO. 2-44	N-BUTANE	1.3
API	4246331513	ISOBUTANE	0.6
LOCATION	SEC. 44, BLK A-7, H&GN SUR. A-73B	N-PENTANE	0.1
OWNER	CHEVRON USA, INC.	ISOPENTANE	0.2
COMPLETED	980505	CYCLOPENTANE	--
SAMPLED	990127	HEXANES PLUS	0.2
FORMATION	PENN-GRANITE WASH	NITROGEN	1.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	TRACE
TRUE VERTICAL DEPTH (FT)	12094	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1200	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1200	CARBON DIOXIDE	0.7
		HELIUM	0.03
		HEATING VALUE*	1.237
		SPECIFIC GRAVITY	0.719
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SAMPLE	20836	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	34.0
COUNTY	SAN JUAN	ETHANE	3.6
FIELD	HOOK AND LADDER	PROPANE	1.6
WELL NAME	HUSKY FEDERAL NO. 15-25	N-BUTANE	0.7
API	4303730317	ISOBUTANE	0.4
LOCATION	SEC. 25, T29S, R23E	N-PENTANE	0.2
OWNER	TOM BROWN, INC.	ISOPENTANE	0.2
COMPLETED	770412	CYCLOPENTANE	--
SAMPLED	010829	HEXANES PLUS	0.3
FORMATION	MISS-LEADVILLE	NITROGEN	36.4
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9080	ARGON	0.2
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	3171	HYDROGEN SULFIDE**	0.2
OPEN FLOW, MCFD	5000	CARBON DIOXIDE	20.9
		HELIUM	1.28
		HEATING VALUE*	518
		SPECIFIC GRAVITY	0.969

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	50578	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 91.4
COUNTY _____	UINTAH	ETHANE _____ 3.9
FIELD _____	WONSITS VALLEY	PROPANE _____ 1.3
WELL NAME _____	WONSITS VALLEY FED. NO. 14	N-BUTANE _____ 0.4
API _____	4304733070	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 12, T8S, R21E	N-PENTANE _____ 0.2
OWNER _____	CHEVERON USA	ISOPENTANE _____ 0.2
COMPLETED _____	980518	CYCLOPENTANE _____ --
SAMPLED _____	990120	HEXANES PLUS _____ 1.6
FORMATION _____	EDGE-WASATCH	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	575	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7600	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ --
WELLHEAD PRESSURE, PSIG _____	273	HYDROGEN SULFIDE** _____ --
OPEN FLOW, MCFD _____	1170	CARBON DIOXIDE _____ 0.2
		HELIUM _____ --
		HEATING VALUE* _____ 1.148
		SPECIFIC GRAVITY _____ 0.646

SAMPLE	20020	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 79.9
COUNTY _____	LINCOLN	ETHANE _____ 12.0
FIELD _____	EMIGRANT SPRINGS	PROPANE _____ 4.3
WELL NAME _____	COUNTY LINE NO. 11-19	N-BUTANE _____ 0.7
API _____	4902321259	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 19, T23N, R111W	N-PENTANE _____ 0.1
OWNER _____	MARATHON OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	981229	CYCLOPENTANE _____ --
SAMPLED _____	980126	HEXANES PLUS _____ 0.5
FORMATION _____	CRET-FRONTIER	NITROGEN _____ 1.0
GEOLOGIC PROVINCE CODE _____	535	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	10496	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	640	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	490	CARBON DIOXIDE _____ 0.6
		HELIUM _____ TRACE
		HEATING VALUE* _____ 1.220
		SPECIFIC GRAVITY _____ 0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20010	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 89.8
COUNTY _____	PARK	ETHANE _____ 5.3
FIELD _____	OREGON BASIN NORTH	PROPANE _____ 1.8
WELL NAME _____	PAULINE NO. 7	N-BUTANE _____ 0.5
API _____	4902905708	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 5, T51N, R100W	N-PENTANE _____ 0.1
OWNER _____	MARATHON OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	970728	CYCLOPENTANE _____ --
SAMPLED _____	980610	HEXANES PLUS _____ 0.2
FORMATION _____	TRIA-CHUGWATER	NITROGEN _____ 1.7
GEOLOGIC PROVINCE CODE _____	520	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2408	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	450	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	850	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.101
		SPECIFIC GRAVITY _____ 0.629

SAMPLE	20011	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 90.0
COUNTY _____	PARK	ETHANE _____ 4.7
FIELD _____	OREGON BASIN SOUTH	PROPANE _____ 1.4
WELL NAME _____	LADY NO. 24	N-BUTANE _____ 0.4
API _____	4902906866	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 31, T51N, R100W	N-PENTANE _____ 0.1
OWNER _____	MARATHON OIL CO.	ISOPENTANE _____ 0.1
COMPLETED _____	970321	CYCLOPENTANE _____ --
SAMPLED _____	980610	HEXANES PLUS _____ 0.2
FORMATION _____	TRIA-CHUGWATER	NITROGEN _____ 2.7
GEOLOGIC PROVINCE CODE _____	520	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2868	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	450	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	325	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.074
		SPECIFIC GRAVITY _____ 0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

T a b l e 2

*Samples from Natural Gas Pipelines
in the United States*

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	20006	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>98.9</u>
COUNTY _____	<u>LAS ANIMAS</u>	ETHANE _____ <u>0.0</u>
FIELD _____	<u>SPANISH PEAK</u>	PROPANE _____ <u>0.0</u>
PLANT _____	<u>EVERGREEN COMP. STATION</u>	N-BUTANE _____ <u>0.0</u>
LOCATION _____	<u>24" INLET</u>	ISOBUTANE _____ <u>0.0</u>
OWNER _____	<u>EVERGREEN OPERATING CORP.</u>	N-PENTANE _____ <u>0.0</u>
SAMPLED _____	<u>980317</u>	ISOPENTANE _____ <u>0.0</u>
FORMATION _____	<u>TERT-RATON,CRET-VERMEJO</u>	CYCLOPENTANE _____ <u>-</u>
GEOLOGIC PROVINCE CODE _____	<u>455</u>	HEXANES PLUS _____ <u>0.0</u>
PRESSURE, PSIG _____	<u>20</u>	NITROGEN _____ <u>0.4</u>
FLOW, MCFD _____	<u>28000</u>	OXYGEN _____ <u>0.0</u>
		ARGON _____ <u>TRACE</u>
		HYDROGEN _____ <u>0.0</u>
		HYDROGEN SULFIDE _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>TRACE</u>
		HEATING VALUE* _____ <u>1.002</u>
		SPECIFIC GRAVITY _____ <u>0.563</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

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